

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

John O'Donnell
CEO
Kokomo Opalescent Glass
1310 South Market Street
Kokomo, IN 46902

Re: Supplemental Request to Provide Information Pursuant to Section 114 of the Clean Air Act

Dear Mr. O'Donnell,

The enclosed supplemental information request is being issued to you pursuant to Section 114 of the Clean Air Act (CAA), 42 U.S.C. § 7414. The Environmental Protection Agency is seeking additional information concerning Kokomo Opalescent Glass' facility in Kokomo, IN.

Under Section 114 of the CAA, EPA is authorized to require the submission of records, reports, and other information for the purpose of determining whether any violations of the CAA have occurred. In accordance with this authority, you are hereby served the enclosed Information Request, and required to provide the requested responses and documents within seven (7) days of receipt of this Request for questions 1-8. Provide the remaining responses within (30) days of receipt of this Request. See Enclosures 1 and 2 for the instructions, definitions, and Information Requests.

You must submit a copy of the full response to:

Sara Froikin
Stationary Source Enforcement Branch
Air Enforcement Division
U.S. Environmental Protection Agency
SARA's ADDRESS

Katie McClintock
EPA Region 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101

Regional contact

Commented [KM1]: Should I just represent oeca here. I would love to get a copy and I think it makes sense in the short term for me to the person the companies consult on technical questions on the 114.

Commented [KM2]: Having them send to everyone means we don't have transmit cbi.

Failure to provide the required information in a timely manner may lead to civil action to obtain compliance or to recover a civil penalty in accordance with Section 113 of the CAA, 42 U.S.C. § 7413. EPA also has authority to seek criminal penalties from any person who knowingly makes any false statement, representation, or certification. Even if you fully comply with this letter, you may still be subject to administrative, civil, or criminal action as provided by the CAA.

You are entitled to assert a claim of business confidentiality, covering all or any required information, in the manner described at 40 C.F.R. § 2.203(b). See Enclosure 3 for instructions on assertion of business confidentiality claims. Note that emissions data, which includes information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of emission data, is not entitled to confidential treatment. Information subject to a claim of business confidentiality will be made available to the public only in accordance with the procedures set forth at 40 C.F.R. Part 2, Subpart B. Unless a confidentiality claim is asserted at the time the required information is provided, EPA may make this information available to the public without further notice to you.

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Sincerely,

Phillip A. Brooks, Director
Air Enforcement Division

Enclosures (3)

cc: regional contact
Katie McClintock, EPA
Sara Froikin, EPA

ENCLOSURE 1

A. INSTRUCTIONS:

- 1) Please provide a separate narrative response to each Information Request and subpart of an Information Request set forth in Enclosure 2 of this Information Request and precede each answer with the number of the Information Request to which it corresponds.
- 2) For each Information Request, identify each person responding to any Information Request contained in this Information Request on your behalf, as well as each person consulted in the preparation of a response.
- 3) For each Information Request, identify each document consulted, examined, or referred to in the preparation of the response or that contains information responsive to the Information Request, and provide a true and correct copy of each such document if not provided in response to another specific Information Request. Indicate on each document produced in response to this Information Request the number of the Information Request to which it corresponds.
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- 5) Requested information can be submitted in electronic form if applicable.

For purposes of this Information Request, the definitions set forth in Section B shall apply and should be considered carefully by you in preparing your responses.

B. DEFINITIONS:

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You are hereby required, in accordance with Section 114(a) of the Act, 42 U.S.C. § 7414(a), to provide the following information regarding the Facility.

1. Provide a facility plot plan or diagram of the Facility and a narrative description of the process. Both should include, but are not be limited to, all sources of emissions to the atmosphere, each glass melting furnace, batch mixing, pollution control devices, glass sheet reheating, annealing lehars, frit processing, and other units that support glass production. Do not include electric kilns in a studio for work with finished glass product.
2. Provide a narrative description to accompany the above facility diagram including the entire process from the receipt of raw materials to the crushing of finished glass.
3. Provide a list of each glass melting furnace currently operating at the Facility.
4. For each furnace identified in response to Question 3, provide the following information:
 - a. The type of the furnace (e.g., regenerative, recuperative, oxyfuel, electric);
 - b. A schematic of the furnace including the tank size, burner position and exhaust points;
 - c. A description of the furnace operation including how often the furnace is cooled down to ambient temperatures;
 - d. For furnaces that pull glass out continuously, provide:
 - i. The maximum pull of the furnace (tons/hr);
 - ii. The holding capacity of the furnace (lbs);
 - iii. The maximum pull of the furnace (tons/yr);
 - e. For furnaces that melt glass in a batch process, provide:
 - i. The maximum holding capacity of the furnace (lbs);
 - ii. The maximum and minimum times between the start of two consecutive melts.
 - iii. The calculated maximum annual production (tpy) and explanation of the calculation;
5. Annual production (tpy) from each furnace for the last 5 years.

Commented [KM3]: Not about nsr, just want an idea of normal throughput. We still won't get an idea of more max capacity unless we go back per 2008.

6. Provide a copy of the current air permit for the facility (if applicable) and the engineering support document.
7. A list of all raw materials used at the facility in the last 3 years and MSDS for each.
8. Provide purchase invoices for all compounds containing chromium, cadmium, arsenic, nickel and lead for the past 3 years.
9. A complete list of all batch recipes that the company has made in the last 3 years.
10. Daily bath records for the last year. For each batch indicate the date and furnace number as well as the complete ingredient list and quantity.
11. For each furnace identified in response to question 3, provide:
 - a. An explanation of how raw materials are charged into the furnace;
 - b. The fuel fired in each furnace and the maximum firing rate (mmbtu/hr) combined for the burners in the furnace.
 - c. The amount of electricity used to melt glass, if used.
 - d. The date the furnace began operation;
 - e. Any dates after 1986 that the Furnace was converted from air to oxyfuel, enlarged in size, or modified to increase air emissions. Provide the date of the project, a description of the project, and the effect on emissions and production.
 - f. The dates of the last rebricking on the furnace.
 - g. An explanation of whether the furnace has been cooled to ambient temperature for a reason other than maintenance, malfunction, control device installation, reconstruction or rebuilding in the last 5 years? If so explain the date, the reason, and the length of time the furnace was at ambient temperature.

Commented [KM4]: A sense of historic emissions.

Commented [KM5]: Batch melters don't use because they wouldn't stay submerged.

Commented [KM6]: Part 61 subpart N date

12. For each furnace identified in response to question 3, identify and describe any combustion or post-combustion controls that are used for any reason. For each, provide the following information and provide data to support the answers:
 - a. The reason the equipment was installed, the date of the installation and the pollutant(s) the equipment is designed to reduce.
 - b. Describe in detail how emission control equipment or reduction practice limits air emissions from each source, and how effectively (in terms of removal efficiency, capture efficiency, distribution efficiency, etc.) each air emission is limited by the corresponding equipment or practice.
 - c. Any engineering documents for the control device regarding the performance of the controls device.
 - d. Any engineering document for the capture system associated with the control device.
 - e. If there is any monitoring of the device (temperature, pressure, etc) that is a parameter for performance, provide the source test establishing the parameter and the last year of records of that parameter.

13. Is the facility subject to Part 61, Subpart N? If so, provide the following records for the last two years:
 - a. Annual emissions of arsenic from each furnace.
 - b. All records required under 40 C.F.R. § 61.165.
14. Is the facility subject to Part 63, Subpart SSSSSS. If no furnaces are subject, explain for each why it is not subject. For any units that are subject provide a copy of the notifications required under 40 C.F.R. § 63.11456 and the last two years of records required under 40 C.F.R § 63.11457
15. For raw material handling, provide a schematic of the batch mixing setup including the original batch mixing, mixing of the colorants, transfer of the batch to the blender, blending of the batch, transfer of the batch out of the blender, and charging the raw materials into the furnace. For each point, provide an explanation of any air pollution capture system, flow rates if known, and any design of the rooms/air system to limit dust creation. For each collection system, provide the total flow rates for each intake and the design flow rate of the system.
16. Does the Facility crush glass to sell as frit or for other disposal? If yes, provide a detailed schematic of the crushing operation. For each point of emissions in the process, provide an explanation of any air pollution capture efforts at that point including an explanation and drawing of the capture system. If the frit process is enclosed in any larger room, explain how this is done, openings to the larger factory and whether the room exhaust is vented to a control device. For the collection system, provide the total flow rates for each intake and the design flow rate of the system.
17. Does the facility spray any coatings on the glass? If so, describe the process in detail, the chemicals sprayed along with their Material Safety Data Sheets, the quantity of each chemical used each year for the last 3 years, a description of emissions from the process (including a description of any visible emissions during coating) and a description of any emissions capture/control system.
18. For each baghouse, explain what is done with the baghouse dust. If the dust is melted onsite, explain where it is stored before melting, which furnace it is melted in, the frequency of the melting and what is done with the glass after melting.
19. Provide copies of each stack emissions test conducted on each furnace or baghouse stack since 1990. This request includes tests done to determine compliance with permits or regulatory standards, engineering tests, and tests for general information. Provide the batch records for all glasses made in furnaces route into the furnace or batches mixed/blended that were routed into the baghouse.
20. Provide information on the refractory the Facility uses in their furnaces both for the tanks of the furnaces and the superstructure. If the Facility uses different refractory in different furnaces, provide information on the refractory products used in each furnace. For each

refractory, provide the MSDS from the manufacturer and an invoice. If the facility uses the same refractory in each tank and superstructure, provide invoices since January 1, 2014.

21. For each furnace that measures temperature inside of the furnace, provide:
- a. The point where the temperature is measured;
 - b. Temperature readings for the last year (on the frequency recorded) in spreadsheet format.

ENCLOSURE 3

CONFIDENTIAL BUSINESS INFORMATION ASSERTION AND SUBSTANTIATION REQUIREMENTS

A. Assertion Requirements

You may assert a business confidentiality claim covering all or part of the information requested in response to this information request, as provided in 40 C.F.R. Section 2.203(b). You may assert a business confidentiality claim covering such information by placing on (or attaching to) the information you desire to assert a confidentiality claim, at the time it is submitted to the EPA, a cover sheet, stamped, or typed legend (or other suitable form of notice) employing language such as "trade secret" or "proprietary" or "company confidential." Allegedly confidential portions of otherwise non-confidential documents should be clearly identified, and may be submitted separately to facilitate identification and handling by the EPA. If you desire confidential treatment only until a certain date or until the occurrence of a certain event, the notice should so state. Information covered by such a claim will be disclosed by the EPA only to the extent, and by means of the procedures, set forth in Section 114(c) of the Clean Air Act (the Act) and 40 C.F.R. Part 2. The EPA will construe the failure to furnish a confidentiality claim with your response to the attached letter as a waiver of that claim, and the information may be made available to the public without further notice to you.

B. Substantiation Requirements

All confidentiality claims are subject to the EPA verification in accordance with 40 C.F.R. Part 2, subpart B. The criteria for determining whether material claimed as confidential is entitled to such treatment are set forth at 40 C.F.R. Sections 2.208 and 2.301, which provide, in part, that you must satisfactorily show that you have taken reasonable measures to protect the confidentiality of the information and that you intend to continue to do so; that the information is not and has not been reasonably obtainable by legitimate means without your consent; and the disclosure of the information is likely to cause substantial harm to your business's competitive edge.

Pursuant to 40 C.F.R. Part 2, subpart B, the EPA may at any time send you a letter asking you to substantiate fully your CBI claim. If you receive such a letter, you must provide the EPA with a response within the number of days set forth in the EPA request letter. Failure to submit your comments within that time would be regarded as a waiver of your confidentiality claim or

claims, and the EPA may release the information. If you receive such a letter, the EPA will ask you to specify which portions of the information you consider confidential. You must be specific by page, paragraph, and sentence when identifying the information subject to your claim. Any information not specifically identified as subject to a confidentiality claim may be disclosed without further notice to you. For each item or class of information that you identify as being subject to CBI, you must answer the following questions, giving as much detail as possible, in accordance with 40 C.F.R. 2.204(e):

1. What specific portions of the information are alleged to be entitled to confidential treatment? For what period of time do you request that the information be maintained as confidential, until a certain date, until the occurrence of a specified event, or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, please specify that event.
2. Information submitted to the EPA becomes stale over time. Why should the information you claim as confidential be protected for the time period specified in your answer to question #1?
3. What measures have you taken to protect the information claimed as confidential? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
4. Is the information contained in any publicly available material such as the Internet, publicly available databases, promotional publications, annual reports, or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
5. Has any governmental body made a determination as to the confidentiality of the information? If so, please attach a copy of the determination.
6. For each category of information claimed as confidential, explain with specificity why release of the information is likely to cause substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as substantial, and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?
7. Do you assert that the information is submitted on a voluntary or a mandatory basis? Please explain the reason for your assertion. If you assert that the information is voluntarily submitted information, explain whether and why disclosure of the information would tend to lessen the availability to the EPA of similar information in the future.
8. Any other issue you deem relevant.

Please note that emission data provided under Section 114 of the Act, 42 U.S.C. Section 7414, is not entitled to confidential treatment under 40 C.F.R. Part 2, subpart B.

Emission data means, with reference to any source of emission of any substance into the air:

(A) Information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of any emission which has been emitted by the source (or of any pollutant resulting from any emission by the source), or any combination of the foregoing;

(B) Information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of the emissions which, under an applicable standard or limitation, the source was authorized to emit (including, to the extent necessary for such purposes, a description of the manner and rate of operation of the source); and

(C) A general description of the location and/or nature of the source to the extent necessary to identify the source and to distinguish it from other sources (including, to the extent necessary for such purposes, a description of the device, installation, or operation constituting the source).

40 C.F.R. Sections 2.301(a)(2)(i)(A), (B) and (C).

If you receive a request for a substantiation letter from the EPA, you bear the burden of substantiating your confidentiality claim. Conclusory allegations will be given little or no weight in the determination. If you fail to claim the information as confidential, it may be made available to the public without further notice to you.

To: 'Brian Renninger'[BrianR@pscleanair.org]; McClintock, Katie[McClintock.Katie@epa.gov]; Owens, Katharine[Owens.Katharine@epa.gov]
From: Hedgpeth, Zach
Sent: Thur 2/18/2016 7:27:01 PM
Subject: RE: Spectrum Glass Test Report

Thanks for the fast action Brian.

Zach Hedgpeth

206-553-1217

From: Brian Renninger [mailto:BrianR@pscleanair.org]
Sent: Thursday, February 18, 2016 10:58 AM
To: McClintock, Katie; Hedgpeth, Zach; owens.katherine@epamail.epa.gov
Subject: Spectrum Glass Test Report

Attached is a copy of the Spectrum Glass Emissions Test from 11-24-03.

Interesting thing about this test. From the details in Appendix A, it appears they used PSCAA method 5 (see attached board resolution for the method) which has EPA method 5 front half, plus addition procedures for measuring back half from the impingers. From just a quick scan it appears that the test firm used the total particulate result to calculate the g/kg value for demonstration with the Subpart CC limit rather than the front half only which would be more in line with the NSPS wording (which refers to using 60.8 and 40 CFR 60 Appendix A test methods).

Upshot, it still demonstrates compliance with the NSPS particulate limit but, does have some condensable information in there as well.

Brian Renninger, P.E.

Engineer

Puget Sound Clean Air Agency

206.689.4077

brianr@pscleanair.org

1904 Third Avenue, Suite 105

Seattle, WA 98101

"Working together for clean air"

www.pscleanair.org

To: McClintock, Katie[McClintock.Katie@epa.gov]
From: Hedgpeth, Zach
Sent: Thur 2/18/2016 2:49:55 PM
Subject: RE: bullseye tanks size

Here's what I have:

- 17 tank furnaces
- each tank furnace has ~1500 lb/day capacity
- most tank furnaces are running daily because still need color variety
- running at ~60% capacity based on demand

- 3 pot furnaces, much smaller than tanks

Zach Hedgpeth, PE
Office of Environmental Assessment
EPA Region 10 - Seattle

hedgpeth.zach@epa.gov
206-553-1217

From: McClintock, Katie
Sent: Wednesday, February 17, 2016 9:31 PM
To: Hedgpeth, Zach
Subject: bullseye tanks size

I wrote down that they have 17 operating furnaces and that there was a 1500 lb holding capacity but they are running at 60% capacity. (Neither declared cbi). Does this mesh with your notes? Were they all the same size? My notes don't say there were different ones.

Katie McClintock
Air Enforcement Officer
EPA Region 10
1200 Sixth Avenue, Suite 900, OCE-101
Seattle, WA 98101
Phone: 206-553-2143
Fax: 206-553-4743
Mcclintock.katie@epa.gov

To: Brian Renninger[BrianR@pscleanair.org]; McClintock, Katie[McClintock.Katie@epa.gov]
From: Hedgpeth, Zach
Sent: Wed 2/17/2016 3:50:54 PM
Subject: RE: Spectrum Glass

Yes, come on up Brian. See you soon. Text me when you arrive and I'll come down and meet you in the lobby.

Zach Hedgpeth, PE

206-553-1217

From: Brian Renninger [mailto:BrianR@pscleanair.org]
Sent: Wednesday, February 17, 2016 7:48 AM
To: McClintock, Katie <McClintock.Katie@epa.gov>; Hedgpeth, Zach <Hedgpeth.Zach@epa.gov>
Subject: Spectrum Glass

Just checking in about coordinating a ride up to Spectrum glass.

Brian Renninger, P.E.

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To: McClintock, Katie[McClintock.Katie@epa.gov]; Owens, Katharine[Owens.Katharine@epa.gov]
From: Hedgpeth, Zach
Sent: Tue 2/16/2016 7:29:36 PM
Subject: Re: Pre-chat for spectrum glass inspection

A couple questions re Spectrum. We can bring up with PSCAA today and with the facility tomorrow.

1. When the 5 newer furnaces were permitted in 1996, was modeling conducted to evaluate compliance with the ASILs for pollutants of concern (metals)?
2. Is there any temperature monitoring at the inlet to baghouses controlling furnaces?

From: McClintock, Katie
Sent: Friday, February 12, 2016 5:38 PM
To: McClintock, Katie; Brian Renninger; Owens, Katharine
Cc: Hedgpeth, Zach; John Schantz
Subject: Pre-chat for spectrum glass inspection
When: Tuesday, February 16, 2016 1:30 PM-2:00 PM.
Where: 1-866-299-3188 code 206-553-2143

I am hoping to fit something else in at 1 that just came up. Let me know if this works or not.

From: Brian Renninger [<mailto:BrianR@pscleanair.org>]
Sent: Friday, February 12, 2016 3:07 PM
To: McClintock, Katie <McClintock.Katie@epa.gov>
Cc: Hedgpeth, Zach <Hedgpeth.Zach@epa.gov>; John Schantz <JohnS@pscleanair.org>
Subject: Next Week Spectrum Glass

I spoke with the Agency Inspector John Schantz and he is up for an inspection on Wednesday. He will also be in the office on Tuesday if you would like to meet or have a telephone call I'm free all day Tuesday except between 3 and 4 pm?

I have also attached the Agency Evaluation Report for the facility. This is what an inspector would have with them during an inspection. It lists: identifying information; required safety equipment; brief summaries of recent inspections and recent NOVs; lists each active Order of Approval and their conditions; and has a list of equipment for the facility. It might be useful for familiarizing yourself with the facility.

Sincerely,

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 - ii. The holding capacity of the furnace (lbs);
 - iii. The maximum pull of the furnace (tons/yr);
 - e. For furnaces that melt glass in a batch process, provide:
 - i. The maximum holding capacity of the furnace (lbs);
 - ii. The maximum and minimum times between the start of two consecutive melts.
 - iii. The calculated maximum annual production (tpy) and explanation of the calculation;
5. Annual production (tpy) from each furnace for the last 5 years.

Commented [HZ3]: Repeat of sub-item #1.

Commented [KM4]: Not about nsr, just want an idea of normal throughput. We still won't get an idea of more max capacity unless we go back per 2008.

6. Provide a copy of the current air permit for the facility (if applicable) and the engineering support document.
7. A list of all raw materials used at the facility in the last 3 years and MSDS for each.
8. Provide purchase invoices for all compounds containing chromium, cadmium, arsenic, nickel and lead for the past 3 years.
9. A complete list of all batch recipes that the company has made in the last 3 years.
10. Daily batch records for the last year. For each batch indicate the date and furnace number as well as the complete ingredient list and quantity.
11. For each furnace identified in response to question 3, provide:

Commented [KM5]: A sense of historic emissions.

- a. An explanation of how raw materials are charged into the furnace;
- b. The fuel fired in each furnace and the maximum firing rate (mmbtu/hr) combined for the burners in the furnace.
- c. The amount of electricity used to melt glass, if used.
- d. The date the furnace began operation;
- e. Any dates after 1986 that the Furnace was converted from air to oxyfuel, enlarged in size, or modified to increase air emissions. Provide the date of the project, a description of the project, and the effect on emissions and production.
- f. The dates of the last rebricking on the furnace.
- g. An explanation of whether the furnace has been cooled to ambient temperature for a reason other than maintenance, malfunction, control device installation, reconstruction or rebuilding in the last 5 years? If so explain the date, the reason, and the length of time the furnace was at ambient temperature.

Commented [KM6]: Batch melters don't use because they wouldn't stay submerged.

Commented [KM7]: Part 61 subpart N date

12. For each furnace identified in response to question 3, identify and describe any combustion or post-combustion controls that are used for any reason. For each, provide the following information and provide data to support the answers:
 - a. The reason the equipment was installed, the date of the installation and the pollutant(s) the equipment is designed to reduce.
 - b. Describe in detail how emission control equipment or reduction practice limits air emissions from each source, and how effectively (in terms of removal efficiency, capture efficiency, distribution efficiency, etc.) each air emission is limited by the corresponding equipment or practice.
 - c. Any engineering documents for the control device regarding the performance of the controls device.
 - d. Any engineering document for the capture system associated with the control device.
 - e. If there is any monitoring of the device (temperature, pressure, etc) that is a parameter for performance, provide the source test establishing the parameter and the last year of records of that parameter.

13. Is the facility subject to Part 61, Subpart N? If so, provide the following records for the last two years:
 - a. Annual emissions of arsenic from each furnace.
 - b. All records required under 40 C.F.R. § 61.165.
14. Is the facility subject to Part 63, Subpart SSSSSS. If no furnaces are subject, explain for each why it is not subject. For any units that are subject provide a copy of the notifications required under 40 C.F.R. § 63.11456 and the last two years of records required under 40 C.F.R. § 63.11457
15. For raw material handling, provide a schematic of the batch mixing setup including the original batch mixing, mixing of the colorants, transfer of the batch to the blender, blending of the batch, transfer of the batch out of the blender, and charging the raw materials into the furnace. For each point, provide an explanation of any air pollution capture system, flow rates if known, and any design of the rooms/air system to limit dust creation. For each collection system, provide the total flow rates for each intake and the design flow rate of the system.
16. Does the Facility crush glass to sell as frit or for other disposal? If yes, provide a detailed schematic of the crushing operation. For each point of emissions in the process, provide an explanation of any air pollution capture efforts at that point including an explanation and drawing of the capture system. If the frit process is enclosed in any larger room, explain how this is done, openings to the larger factory and whether the room exhaust is vented to a control device. For the collection system, provide the total flow rates for each intake and the design flow rate of the system.
17. Does the facility spray any coatings on the glass? If so, describe the process in detail, the chemicals sprayed along with their Material Safety Data Sheets, the process step where the coatings are applied, the quantity of each chemical used each year for the last 3 years, a description of emissions from the process (including a description of any visible emissions during coating) and a description of any emissions capture/control system.
18. For each baghouse, explain what is done with the baghouse dust. If the dust is melted onsite, explain where it is stored before melting, which furnace it is melted in, the frequency of the melting and what is done with the glass after melting.
19. Provide copies of each stack emissions test conducted on each furnace or baghouse stack since 1990. This request includes tests done to determine compliance with permits or regulatory standards, engineering tests, and tests for general information. Provide the batch records for all glasses made in furnaces route into the furnace or batches mixed/blended that were routed into the baghouse.
20. Provide information on the refractory the Facility uses in their furnaces both for the tanks of the furnaces and the superstructure. If the Facility uses different refractory in different furnaces, provide information on the refractory products used in each furnace. For each

refractory, provide the MSDS from the manufacturer and an invoice. If the facility uses the same refractory in each tank and superstructure, provide invoices since January 1, 2014.

21. For each furnace that measures temperature inside of the furnace, provide:
- a. The point where the temperature is measured;
 - b. Temperature readings for the last year (on the frequency recorded) in spreadsheet format.

ENCLOSURE 3

CONFIDENTIAL BUSINESS INFORMATION ASSERTION AND SUBSTANTIATION REQUIREMENTS

A. Assertion Requirements

You may assert a business confidentiality claim covering all or part of the information requested in response to this information request, as provided in 40 C.F.R. Section 2.203(b). You may assert a business confidentiality claim covering such information by placing on (or attaching to) the information you desire to assert a confidentiality claim, at the time it is submitted to the EPA, a cover sheet, stamped, or typed legend (or other suitable form of notice) employing language such as “trade secret” or “proprietary” or “company confidential.” Allegedly confidential portions of otherwise non-confidential documents should be clearly identified, and may be submitted separately to facilitate identification and handling by the EPA. If you desire confidential treatment only until a certain date or until the occurrence of a certain event, the notice should so state. Information covered by such a claim will be disclosed by the EPA only to the extent, and by means of the procedures, set forth in Section 114(c) of the Clean Air Act (the Act) and 40 C.F.R. Part 2. The EPA will construe the failure to furnish a confidentiality claim with your response to the attached letter as a waiver of that claim, and the information may be made available to the public without further notice to you.

B. Substantiation Requirements

All confidentiality claims are subject to the EPA verification in accordance with 40 C.F.R. Part 2, subpart B. The criteria for determining whether material claimed as confidential is entitled to such treatment are set forth at 40 C.F.R. Sections 2.208 and 2.301, which provide, in part, that you must satisfactorily show that you have taken reasonable measures to protect the confidentiality of the information and that you intend to continue to do so; that the information is not and has not been reasonably obtainable by legitimate means without your consent; and the disclosure of the information is likely to cause substantial harm to your business’s competitive edge.

Pursuant to 40 C.F.R. Part 2, subpart B, the EPA may at any time send you a letter asking you to substantiate fully your CBI claim. If you receive such a letter, you must provide the EPA with a response within the number of days set forth in the EPA request letter. Failure to submit your comments within that time would be regarded as a waiver of your confidentiality claim or

claims, and the EPA may release the information. If you receive such a letter, the EPA will ask you to specify which portions of the information you consider confidential. You must be specific by page, paragraph, and sentence when identifying the information subject to your claim. Any information not specifically identified as subject to a confidentiality claim may be disclosed without further notice to you. For each item or class of information that you identify as being subject to CBI, you must answer the following questions, giving as much detail as possible, in accordance with 40 C.F.R. 2.204(e):

1. What specific portions of the information are alleged to be entitled to confidential treatment? For what period of time do you request that the information be maintained as confidential, until a certain date, until the occurrence of a specified event, or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, please specify that event.
2. Information submitted to the EPA becomes stale over time. Why should the information you claim as confidential be protected for the time period specified in your answer to question #1?
3. What measures have you taken to protect the information claimed as confidential? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
4. Is the information contained in any publicly available material such as the Internet, publicly available databases, promotional publications, annual reports, or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
5. Has any governmental body made a determination as to the confidentiality of the information? If so, please attach a copy of the determination.
6. For each category of information claimed as confidential, explain with specificity why release of the information is likely to cause substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as substantial, and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?
7. Do you assert that the information is submitted on a voluntary or a mandatory basis? Please explain the reason for your assertion. If you assert that the information is voluntarily submitted information, explain whether and why disclosure of the information would tend to lessen the availability to the EPA of similar information in the future.
8. Any other issue you deem relevant.

Please note that emission data provided under Section 114 of the Act, 42 U.S.C. Section 7414, is not entitled to confidential treatment under 40 C.F.R. Part 2, subpart B.

Emission data means, with reference to any source of emission of any substance into the air:

(A) Information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of any emission which has been emitted by the source (or of any pollutant resulting from any emission by the source), or any combination of the foregoing;

(B) Information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of the emissions which, under an applicable standard or limitation, the source was authorized to emit (including, to the extent necessary for such purposes, a description of the manner and rate of operation of the source); and

(C) A general description of the location and/or nature of the source to the extent necessary to identify the source and to distinguish it from other sources (including, to the extent necessary for such purposes, a description of the device, installation, or operation constituting the source).

40 C.F.R. Sections 2.301(a)(2)(i)(A), (B) and (C).

If you receive a request for a substantiation letter from the EPA, you bear the burden of substantiating your confidentiality claim. Conclusory allegations will be given little or no weight in the determination. If you fail to claim the information as confidential, it may be made available to the public without further notice to you.

To: Narvaez, Madonna[Narvaez.Madonna@epa.gov]; McClintock, Katie[McClintock.Katie@epa.gov]
From: Hedgpeth, Zach
Sent: Fri 2/12/2016 8:53:53 PM
Subject: RE: Brief description of the Xact sampler

Thanks Madonna, that is interesting.

Zach Hedgpeth, PE

206-553-1217

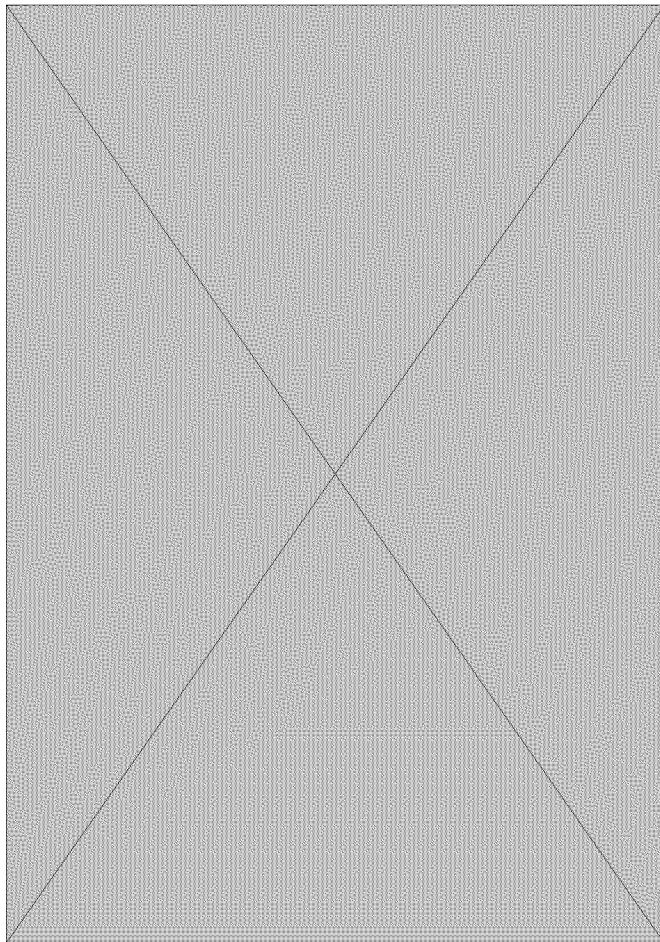
From: Narvaez, Madonna
Sent: Friday, February 12, 2016 12:33 PM
To: Hedgpeth, Zach <Hedgpeth.Zach@epa.gov>; McClintock, Katie <McClintock.Katie@epa.gov>
Subject: Brief description of the Xact sampler

The Xact 625, shown in Figure 2-1, determines metals in airborne PM less than 10 micrometers (μm) in aerodynamic diameter (PM_{10}). Metals determination by the Xact 625 is based on the principle of X-ray fluorescence (XRF), in which X-rays from a source cause removal of an electron from an inner electronic shell of a metal atom in a sample. The vacancy in the inner shell is then filled by an electron from an outer shell, with resulting emission of an X-ray with a wavelength longer than that of the original excitation and characteristic of the metal in question. The Xact 625 uses energy-dispersive XRF (EDXRF), in which the detector and electronics resolve emitted X-rays based on their energy. The EDXRF approach allows use of a relatively simple optical path and a relatively low power X-ray source, and thus reduces the instrument cost. The EDXRF approach also provides acquisition of the entire X-ray spectrum very rapidly, so that many elements in the periodic table can be detected within a few seconds.

To monitor metals in atmospheric PM, the Xact 625 uses an automated moveable filter tape system, in which sample air is drawn through a small spot on the tape, collecting and concentrating PM_{10} onto that spot. The tape then advances, placing the collected sample spot in the X-ray excitation and analysis section of the instrument and initiating sampling onto a previously unexposed spot on the tape. The sequence of sampling and analysis can continue automatically, limited only by the supply of filter tape. The duration of sample collection at each

spot can be set at a constant interval, or varied to maintain detection performance in the face of varying atmospheric PM₁₀ levels. The Xact 625 samples ambient air at a constant flow rate of 16.7 L/min (i.e., 1 m³/hr). The Xact 625's sample inlet is designed to provide uniform sample deposition, and the instrument analyzes approximately 90% of the sample spot area, to minimize effects of sample inhomogeneity. The Xact 625 incorporates sensors for temperature and atmospheric pressure, and uses those data to maintain a constant volumetric sample flow and consequently an accurate PM₁₀ inlet size cut. In addition, the Xact 625 performs the following automatic internal QC checks to assure data quality:

- Internal energy alignment check, performed by XRF analysis of a copper rod, conducted over a 15-minute period starting at midnight each day
- Upscale rod check, performed by XRF analysis of a metal rod containing chromium, lead, copper, and cadmium, conducted once per day over a 15-minute period
- Flow check, conducted at the same time as the upscale rod check, to determine the Xact 625 sample air flow by insertion of a second mass flow meter into the flow path
- Palladium rod stability check, conducted by XRF analysis of a palladium rod in every ambient sample analysis.



Madonna Narvaez

Sr. Air Toxics Advisor

USEPA, R10

1200 Sixth Ave., Ste 900

MC: AWT-107

206.553.2117 - phone

206.553.0110 - fax

To: Owens, Katharine[Owens.Katharine@epa.gov]; McClintock, Katie[McClintock.Katie@epa.gov]
From: Hedgpeth, Zach
Sent: Fri 2/12/2016 4:32:37 PM
Subject: RE: Spectrum Glass Co.

You are welcome to join us Katie O. We'll also be coordinating with PSCAA.

We will plan to arrive around 9:30 am...depart between 8-8:30.

Zach Hedgpeth, PE

206-553-1217

From: Owens, Katharine
Sent: Thursday, February 11, 2016 3:49 PM
To: McClintock, Katie <McClintock.Katie@epa.gov>; Hedgpeth, Zach <Hedgpeth.Zach@epa.gov>
Subject: Spectrum Glass Co.

Madonna has kept me in the loop on Bullseye since Spectrum is larger, in Washington and a potential hot issue. If you foresee a scenario where the facility would need an applicability determination it would be helpful for me to see the facility. I hear you two are going up next week. If you think this is something necessary down the line and you're okay with one extra on your inspection next week, I would be happy to accompany you both. I still have my credentials ☺ (they don't expire until 8/31/2017).

Looks like it's only 40 mins away, if I'm looking at the correct facility:
<https://echo.epa.gov/detailed-facility-report?fid=110020498978>

-Katie

From: Hedgpeth, Zach
Location: R10Sea-Room-12Maple/R10-Rooms-Service-Center
Importance: Normal
Subject: Accepted: hold for bullseye conversation if necessary
Start Date/Time: Mon 2/8/2016 10:00:00 PM
End Date/Time: Mon 2/8/2016 11:00:00 PM

To: Hedgpeth, Zach[Hedgpeth.Zach@epa.gov]
From: McClintock, Katie
Sent: Thur 2/18/2016 5:31:38 AM
Subject: bullseye tanks size

I wrote down that they have 17 operating furnaces and that there was a 1500 lb holding capacity but they are running at 60% capacity. (Neither declared cbi). Does this mesh with your notes? Were they all the same size? My notes don't say there were different ones.

Katie McClintock

Air Enforcement Officer

EPA Region 10

1200 Sixth Avenue, Suite 900, OCE-101

Seattle, WA 98101

Phone: 206-553-2143

Fax: 206-553-4743

Mcclintock.katie@epa.gov

To: McClintock, Katie[McClintock.Katie@epa.gov]; Hedgpeth, Zach[Hedgpeth.Zach@epa.gov]
From: Brian Renninger
Sent: Wed 2/17/2016 3:47:52 PM
Subject: Spectrum Glass

Just checking in about coordinating a ride up to Spectrum glass.

Brian Renninger, P.E.

Engineer

Puget Sound Clean Air Agency

206.689.4077

brianr@pscleanair.org

1904 Third Avenue, Suite 105

Seattle, WA 98101

"Working together for clean air"

www.pscleanair.org

To: McClintock, Katie[McClintock.Katie@epa.gov]
Cc: Hedgpeth, Zach[Hedgpeth.Zach@epa.gov]; John Schantz[JohnS@pscleanair.org]
From: Brian Renninger
Sent: Tue 2/16/2016 10:19:28 PM
Subject: NOC 10024 application
[NOC10024.pdf](#)
[Furnace Resizing Project](#)

Attached is a copy of the NOC application for the furnace #1 resizing. This application was never completed. Also attached is a copy of my questions regarding the rebuild.

But, looking at the diagrams in the application, my memory appears incorrect that the footprint was increasing. The footprint was apparently actually reducing in size. So, it counted as a new unit in terms of agency minor new source review but, might (or might not) have been a reconstructed unit per the NSPS depending on the details of the economic considerations in the reconstruction rules of Subpart A.

Brian Renninger, P.E.

Engineer

Puget Sound Clean Air Agency

206.689.4077

brianr@pscleanair.org

1904 Third Avenue, Suite 105

Seattle, WA 98101

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PUGET SOUND CLEAN AIR AGENCY

1904 3rd Ave Ste 105
Seattle WA 98101-3317

(206) 689-4052 Fax: (206) 343-7522 <www.pscleanair.org>

ENVIRONMENTAL CHECKLIST

WAIT - You may not need to fill out the attached checklist.
Please read and check the following:

Because of the State Environmental Policy Act, the action for which you are filing a Notice of Construction and Application for Approval to this Agency requires the completion of an environmental checklist.

BUT: If you can answer "yes" to either of the following statements with respect to the action being proposed, the attached checklist need not be completed:

1. I have obtained a State, City, or County Permit and filled out an environmental checklist.

☐ Yes

☐ No

If you answered "yes", give State, City or County Department, and date, and attach a copy of the checklist.

2. An environmental checklist or assessment has previously been filled out for another agency.

☐ Yes

☐ No

If "yes", give agency and date, and attach a copy of the checklist.

If your answer to both of the above statements is "no", you must complete the attached environmental checklist.

Prepared by:

(Signature)

(Print Name)

(Title)

Date:

Proponent: Puget Sound Clean Air Agency

Project, Brief Title:

Environmental Checklist

Purpose of Checklist:

The State Environmental Policy Act (SEPA), Chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An Environmental Impact Statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, type "do not know" or "does not apply". Complete answers to the questions now, may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for non-project proposals:

Complete this checklist for non-project proposals, even though questions may be answered "does not apply". IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON-PROJECT ACTIONS (part D).

For non-project actions, the references in the checklist to the words "project", "applicant", and "property or site" should be read as "proposal", "proposer", and "affected geographic areas", respectively.

TO BE COMPLETED BY THE APPLICANT

A. BACKGROUND

1. Name of proposed project, if applicable:
2. Name of applicant:
3. Address and phone number of applicant and contact person:
Name: Title:
Firm: Telephone:
PO Box/Street:
City/State/Zip:
4. Date checklist prepared:
5. Agency requesting checklist:
6. Proposed timing or schedule (including phasing, if applicable).
7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
10. List any government approvals or permits that will be needed for your proposal, if known.
11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

B. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site (flat, rolling, hilly, steep slopes, mountainous, other):
- b. What is the steepest slope on the site (approximate percent slope)?
- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them, and note any prime farmland.
- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

2. AIR

- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial, woodsmoke) during construction and when the project is completed? If any, generally describe and give approximate quantities, if known.

- b. Are there any off-site sources of emissions or odor that may affect your proposal?
If so, generally describe.
- c. Proposed measures to reduce or control emissions or other impacts to air, if any:

3. WATER

a. Surface

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.
- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.
- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.
- 4) Will the proposal require surface water withdrawals or diversions? If yes, give general description, purpose, and approximate quantities, if known.
- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

b. Ground

- 1) Will groundwater be withdrawn, or will water be discharged to groundwater? If yes, give general description, purpose, and approximate quantities, if known.
- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the systems, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

c. Water Runoff (including storm water)

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

2) Could waste material enter ground or surface waters? If so, generally describe.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

4. Plants

a. Indicate types of vegetation found on the site.

___ deciduous trees: ___ alder ___ maple ___ aspen

___ other (specify):

___ evergreen trees: ___ fir ___ cedar ___ pine

___ other (specify):

___ shrubs

___ grass

___ pasture

___ crop or grain

___ wet soil plants: ___ cattail ___ buttercup ___ bullrush

___ skunk cabbage ___ other (specify):

___ water plants: ___ water lily ___ eelgrass ___ milfoil

___ other (specify):

___ other types of vegetation (specify):

b. What kind and amount of vegetation will be removed or altered?

c. List threatened or endangered species known to be on or near the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

5. Animals

- a. Indicate birds and animals that have been observed on or near the site or are known to be on or near the site.

___ Birds: ___ hawk ___ heron ___ eagle ___ songbirds
 ___ other (specify):

___ Mammals: ___ deer ___ bear ___ elk ___ beaver
 ___ other (specify):

___ Fish: ___ bass ___ salmon ___ trout ___ herring ___ shellfish
 ___ other (specify):

- b. List any threatened or endangered species known to be on or near the site.
- c. Is the site part of a migration route? If so, explain.
- d. Proposed measures to preserve or enhance wildlife, if any:

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, woodstove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe:

1) Describe special emergency services that might be required.

2) Proposed measures to reduce or control environmental health hazards, if any:

b. Noise

- 1) What types of noise exist in the area that may affect your project (for example, traffic, equipment, operation, other)?
- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example, traffic, construction, operation, other)? Indicate what hours noise would come from the site.
- 3) Proposed measures to reduce or control noise impacts, if any:

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties?
- b. Has the site been used for agriculture? If so, describe.
- c. Describe any structures on the site.
- d. Will any structures be demolished? If so, what?
- e. What is the current zoning classification of the site?
- f. What is the current comprehensive plan designation of the site?
- g. If applicable, what is the current shoreline master program designation of the site?
- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
- i. Approximately how many people would reside or work in the completed project?
- j. Approximately how many people would the completed project displace?
- k. Proposed measures to avoid or reduce displacement impacts, if any:
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high-middle- or low-income housing.
- b. Approximately how many units, if any, would be eliminated? Indicate whether high-middle- or low-income housing.
- c. Proposed measures to reduce or control housing impacts, if any:

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?
- b. What views in the immediate vicinity would be altered or obstructed?
- c. Proposed measures to reduce or control aesthetic impacts, if any:

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
- b. Could light or glare from the finished project be a safety hazard or interfere with views?
- c. What existing off-site sources of light or glare may affect your proposal?
- d. Proposed measures to reduce or control light and glare impacts, if any:

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?
- b. Would the proposed project displace any existing recreational uses? If so, describe.

- c. Proposed measures to reduce or control impacts on recreation, including recreational opportunities to be provided by the project or applicant, if any:

13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.
- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
- c. Proposed measures to reduce or control impacts, if any:

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on-site plans, if any.
- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
- c. How many parking spaces would the completed project have? How many would the project eliminate?
- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
- g. Proposed measures to reduce or control transportation impacts, if any:

15. Public Services

- a. Would the project result in an increased need for public services (for example, fire protection, police protection, health care, schools, other)? If so, generally describe.

b. Proposed measures to reduce or control direct impacts on public services, if any:

16. Utilities

a. Indicate utilities currently available at the site:

☐ electricity

☐ telephone

☐ natural gas

☐ sanitary sewer

☐ water

☐ septic system

☐ refuse service

☐ other (specify):

b. Describe the utilities that are proposed for the project, the utility providing the service, and service, and the general construction activities on the site or in the immediate vicinity that might be needed.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Date Submitted: _____

D. SUPPLEMENTAL SHEET FOR NON-PROJECT ACTIONS

(Do not use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substance; or production of noise?

Proposed measures to avoid or reduce such increase are:

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

3. How would the proposal be likely to deplete energy or natural resources?

Proposed measures to protect or conserve energy and natural resources are:

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

Proposed measures to protect such resources or to avoid or reduce impacts are:

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

Proposed measures to avoid or reduce shoreline and land use impacts are:

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

Proposed measures to reduce or respond to such demand(s) are:

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

PUGET SOUND CLEAN AIR AGENCY

Additional Notice of Construction Application Requirements for

MELTING FURNACES, KILNS, BAKING OVENS, ROASTING OVENS, CURING OVENS

General

Description of Equipment and its Purpose [*Specify melting furnace, kiln, or oven and its intended use (melt metal or glass; manufacture cement, lime, bricks; bake or roast foods; dry or cure parts; etc.)*]

Identify which of the following categories the project fits into:

1. New Construction (*New construction also includes existing, unpermitted equipment or processes*)
2. Reconstruction (*Reconstruction means the replacement of components of an existing facility to such an extent that the fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable entirely new facility*)
3. Modification (*Modification means any physical change in, or change in the method of operation of, a source, except an increase in the Hours of Operation or production rates (not otherwise prohibited) or the use of an alternative fuel or raw material that the source is approved to use under an Order of Approval or operating permit, that increases the amount of any air contaminant emitted or that results in the emission of any air contaminant not previously emitted*)
4. Amendment to Existing Order of Approval Permit Conditions

Date of Manufacture (month/yr) [*This is the date when the unit was built by the manufacturer. It is required only for secondary lead furnaces (pot, blast, cupola, reverbatory), secondary brass and bronze furnaces not at foundries (reverbatory, electric, blast, cupola), basic oxygen process furnaces, ferroalloy (electric arc), carbon, alloy or specialty steel furnaces (electric arc, argon-oxygen decarbuization), glass furnaces (other than hand melting), cement kilns, and lime kilns.*]

Estimated Hours of Operation (hr/day, day/wk, wk/yr) [*Estimate the hours of operation for the new furnace, kiln or oven - not necessarily the entire facility*]

Estimated Installation Date [*Estimate the date when the furnace, kiln or oven will be put into service*]

Raw Material Properties

Raw Materials Charged [*Specify the raw materials put into the furnace, kiln or oven*]

Charging Rate (lb/hr) [*Specify the average amount of each material charged on an hourly basis*]

Design *[Most design information is available from the manufacturer or vendor. Submittal of a brochure, scale drawing or process and instrumentation diagram will facilitate the review of the permit application]*

Make & Model *[Specify the manufacturer of the furnace, kiln or oven and its model number - not its serial number]*

Type of Furnace, Kiln, or Oven

- *For melting furnaces, specify electric arc, induction, crucible, pot, reverbatory, annealing, heat treating, reheating, glass, retort, or other (describe).*
- *For kilns, specify cement, lime, brick or other (describe).*
- *For ovens, specify curing, core baking, bread baking, coffee roasting, or other (describe)*

Type of Fuel *[Specify natural gas, distillate (#2 fuel oil, diesel), residual (#6 fuel oil, bunker oil), waste oil (used oil), wood, coal, or other (describe)]*

Rated Heat Input (MMBtu/hr) *[Specify the rated heat input - not the heat output. The rated heat input is equal to the maximum fuel firing rate times its upper heating value]*

Estimated Fuel Usage (Million cu ft/yr, thousand gal/yr, tons/yr) *[Estimate how many million cubic feet of gaseous fuel, thousands of gallons of liquid fuel (not waste), or tons of solid fuel (not waste) will be burned annually. Alternatively, specify how many billion Btu/yr.]*

Rated Capacity *[Specify]* (production units/hr)

Estimated Annual Production (production units/yr)

Nitrogen Oxide Emission Controls

- *Specify if using low-NO_x burners, or*
- *staged combustion, or*
- *flue gas recirculation, or*
- *ammonia injection, or*
- *selective catalytic reduction.*

If applicable, complete the permit form for selective catalytic reduction. If selective noncatalytic reduction is used, describe the system in detail

Particulate Emission Controls *[Specify 'none', baghouse, Venturi scrubber, or ESP and complete the applicable permit forms]*

Sulfur Dioxide Emission Controls *[Specify 'none', dry injection, spray dryer, or absorber and complete the applicable permit forms]*

Emissions Estimate (lb/hr, lb/yr) *[Estimate the emissions of each pollutant and include your calculations. Emission factors are available from <http://www.epa.gov/ttn/chief/ap42/index.html>]*

Stack *[Required only for units without add on control equipment. Otherwise, use the appropriate permit forms for control equipment (spray dryer, dry injection, baghouse, absorber, ESP, selective catalytic reduction, selective noncatalytic reduction, ammonia or urea injection)]*

Stack Height (ft) [*Specify the height of the top of the stack above ground level - not above the building or sea level*]

Stack Diameter or Rectangular Cross-Sectional Dimensions (inches) [*Specify the internal dimensions - not the external dimensions*]

Exhaust Flowrate (acfm) [*Specify the airflow in actual cubic feet per minute*]

Exhaust Temperature (°F) [*Specify the temperature of the exhaust leaving the stack*]

Distance to Nearest Property Line (ft) [*Specify the distance from the base of the stack to the nearest property line*]

Height, Length and Width of Buildings (ft) [*Specify the approximate dimensions of any buildings that are >40% of the stack height and are located within 5 building heights from the stack*]

Operation and Maintenance

Describe Preventive Maintenance [*Specify the periodic maintenance recommended by the manufacturer and its frequency*]

NOTICE OF CONSTRUCTION AND APPLICATION FOR APPROVAL

Incomplete applications delay Agency review, so please fill out your application thoroughly. Instructions for filling out the application are available on the [NOC Permit Application Instructions](#) webpage.

GENERAL EQUIPMENT FORM				FORM P	
AGENCY USE ONLY		Date:	Reg No.:	NOC No.:	
Type of business: (check) <input type="checkbox"/> new <input type="checkbox"/> existing		Status of equipment (check): <input type="checkbox"/> new <input type="checkbox"/> altered <input type="checkbox"/> existing <input type="checkbox"/> relocation		Applicant Name & Mailing Address: Phone No.: Fax No.: Email Address:	
Company (or owner) name & mailing address:			Installation address (Include city & zip code):		
Nature of Business / Type of Process:			Installation address (Include city & zip code):		
PROCESS EQUIPMENT AND CONTROL EQUIPMENT					
Process Equipment			Air Pollution Control Equipment		
# Units	Equipment Type		# Units	Equipment Type	
<input type="checkbox"/> Attach a process flow diagram			<input type="checkbox"/> Attach a project description		
PREPARER'S CERTIFICATION STATEMENT					
I, the undersigned, certify that the information contained in this application and the accompanying forms, plans, and supplemental data described herein is to the best of my knowledge, accurate and complete.					
Signature:				Date:	
Type or print name:			Title:		Phone:
Prepared by (signature and title):					

Your application will not be processed unless you mail a \$1,000 filing fee payment *along with this application*. Additional fees may apply after application review. An Environmental Checklist form and additional equipment specific forms may also be needed. These forms are available on the Agency's [Regulatory Forms](#) webpage. See the [NOC Permit Application Instructions](#) webpage for instructions on filling out the permit application. If you want to pay by credit card, please call Andrea King at (206) 689-4014.

NOTICE OF CONSTRUCTION AND APPLICATION FOR APPROVAL

Incomplete applications delay Agency review, so please fill out your application thoroughly. Instructions for filling out the application are available on the [NOC Permit Application Instructions webpage](#).

GENERAL EQUIPMENT FORM		FORM P	
AGENCY USE ONLY		Date: 2/27/09	Reg No.: 14107 NOC No.: 10024
Type of business: (check) <input type="checkbox"/> new <input checked="" type="checkbox"/> existing	Status of equipment (check): <input type="checkbox"/> new <input type="checkbox"/> altered <input checked="" type="checkbox"/> existing <input type="checkbox"/> relocation	Applicant Name & Mailing Address: Brandon Byhre - Spectrum Glass Company 24105 Sno-Woodinville Rd Woodinville WA, 98072 Phone No.: 425-483-6699 Fax No.: 425-483-9007 Email Address: brandonbyhre@spectrumglass.com	
Company (or owner) name & mailing address: Spectrum Glass Company 24105 Sno-Woodinville Rd Woodinville WA, 98072		Installation address (Include city & zip code): 24105 Sno-Woodinville Rd Woodinville WA, 98072	
Nature of Business / Type of Process: Furnace Size Reduction			
PROCESS EQUIPMENT AND CONTROL EQUIPMENT			
Process Equipment		Air Pollution Control Equipment	
# Units	Equipment Type	# Units	Equipment Type
1	Electric Melting Furnace		
<input type="checkbox"/> Attach a process flow diagram		<input type="checkbox"/> Attach a project description	
PREPARER'S CERTIFICATION STATEMENT			
I, the undersigned, certify that the information contained in this application and the accompanying forms, plans, and supplemental data described herein is to the best of my knowledge, accurate and complete.			
Signature: Brandon Byhre		Date: 2/27/2009	
Type or print name: Brandon Byhre	Title: Glass Technology Manager	Phone: 425-483-6699	
Prepared by (signature and title): Brandon Byhre Glass Technology Manager			

PAID
AMOUNT \$1,000.00
CK. NO. 75352
RCPT. NO. 87188

Your application will not be processed unless you mail a \$1,000 filing fee payment along with this application. Additional fees may apply after application review. An Environmental Checklist form and additional equipment specific forms may also be needed. These forms are available on the Agency's [Regulatory Forms](#) webpage. See the [NOC Permit Application Instructions](#) webpage for instructions on filling out the permit application. If you want to pay by credit card, please call Andrea King at (206) 689-4014.

Dear Mr. Renninger,

We would like to modify one of our existing electric melt furnaces. I would like to find out if this falls under a B10 exemption. If not, can we have a new order of approval that encompasses both furnace sizes allowing us to size the furnace at any given time to produce product to fulfill sales needs at that time. The current furnace produces ~40,000 lbs of glass per day and ~13,400,000 per year when at full production. We would like to replace this furnace with a smaller electric melt furnace (Same design as an existing electric melt furnace we currently have). The new/smaller furnace will melt ~25,000 lbs of glass per day and ~8,375,000 per year when at full production.

Our current furnace has been operating 20 hrs/day, 4 days/week, and 48 weeks/year. On the current schedule the furnace can lose its batch pile over the three idle days potentially creating emissions. The new/smaller furnace will operate 9.5 hrs/day, 7 days/week, and 48 weeks/year. This will allow us to keep a batch pile on the molten surface at all times minimizing emissions.

We are estimating this furnace to be resized and start production in January of 2010. The raw materials to be charged into this furnace and the charging rate of each material are listed below.

<u>Chemical</u>	<u>lbs/can</u>	<u>cans/hr charged</u>	<u>Charging Rate lbs/hr</u>
Sand	2680	0.5	1340
Soda Ash	951	0.5	475.5
Limestone	580	0.5	290
Nepheline Syanite	180	0.5	90
Potassium Aluminum Fluoride	102	0.5	51
Borax	85	0.5	42.5
Sodium Nitrate	15	0.5	7.5
Sodium Sulfate	12	0.5	6
Carbocite	0.5	0.5	0.25

The current furnace does not have any Particulate Emission Controls. The new/smaller downsized furnace will not have any Particulate Emission Controls. The existing ducting and Stack of the current furnace will not be changed. The current furnace does not have any Sulfur Dioxide Emission Controls. The new/smaller downsized furnace will not have any Sulfur Dioxide Emission Controls either.

The height of the top of the stack above ground level is 40' 4".

The stack diameter is 4'.

The exhaust flow rate @ 600 rpm, 48,000 cfm, 4" static.

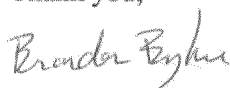
The exhaust flow rate @ 600 rpm, 20,000 cfm, 9" static.

The exhaust temperature leaving the stack is 258 °F.

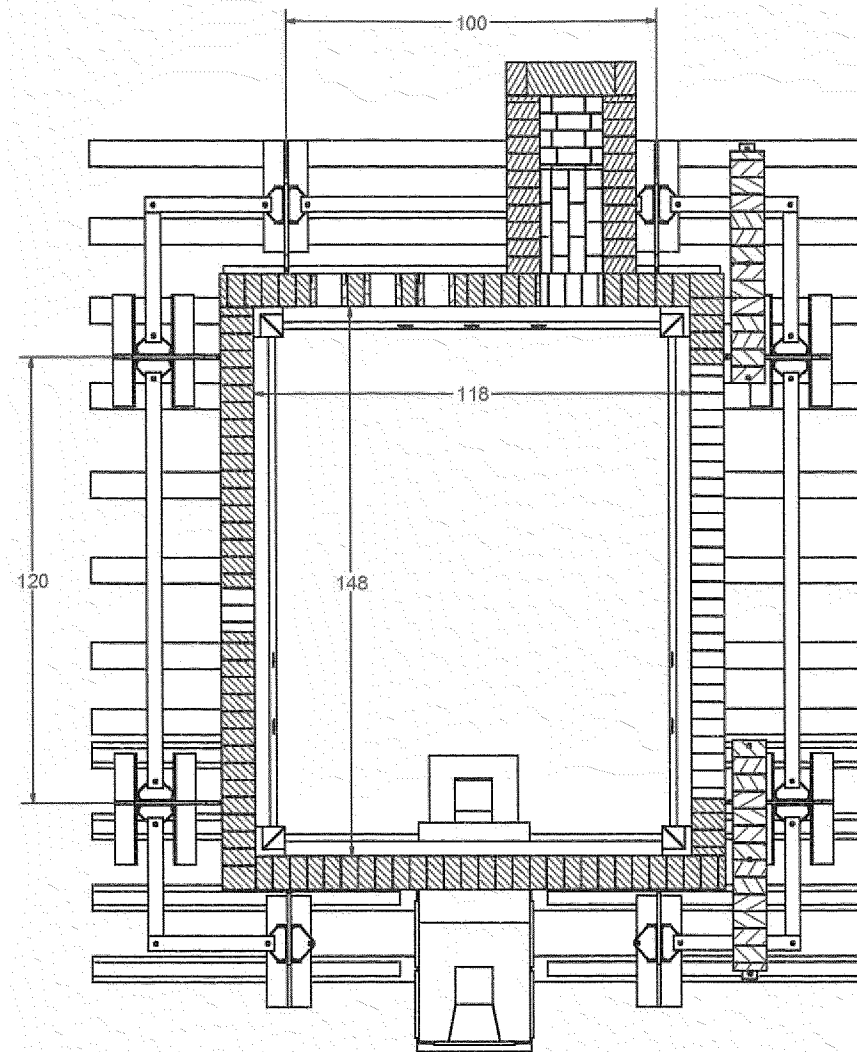
The distance from the stack to the nearest property line is 75' 5".

The height maximum height of the building is 51'. The maximum length of the building is 350'. The maximum width of the building is 320'.

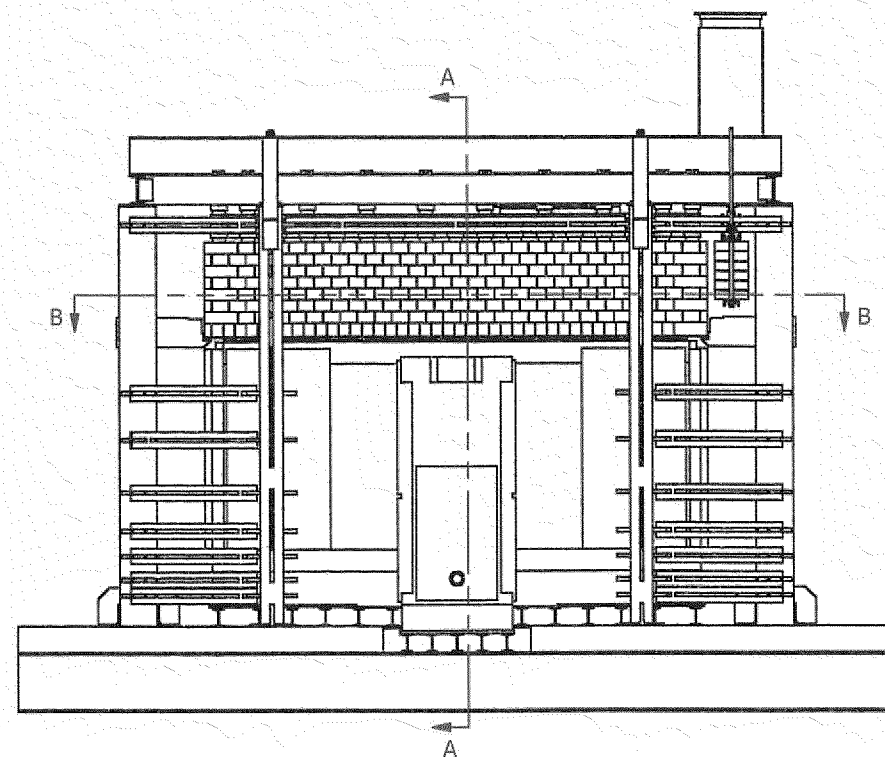
Thank you,



Brandon Byhre



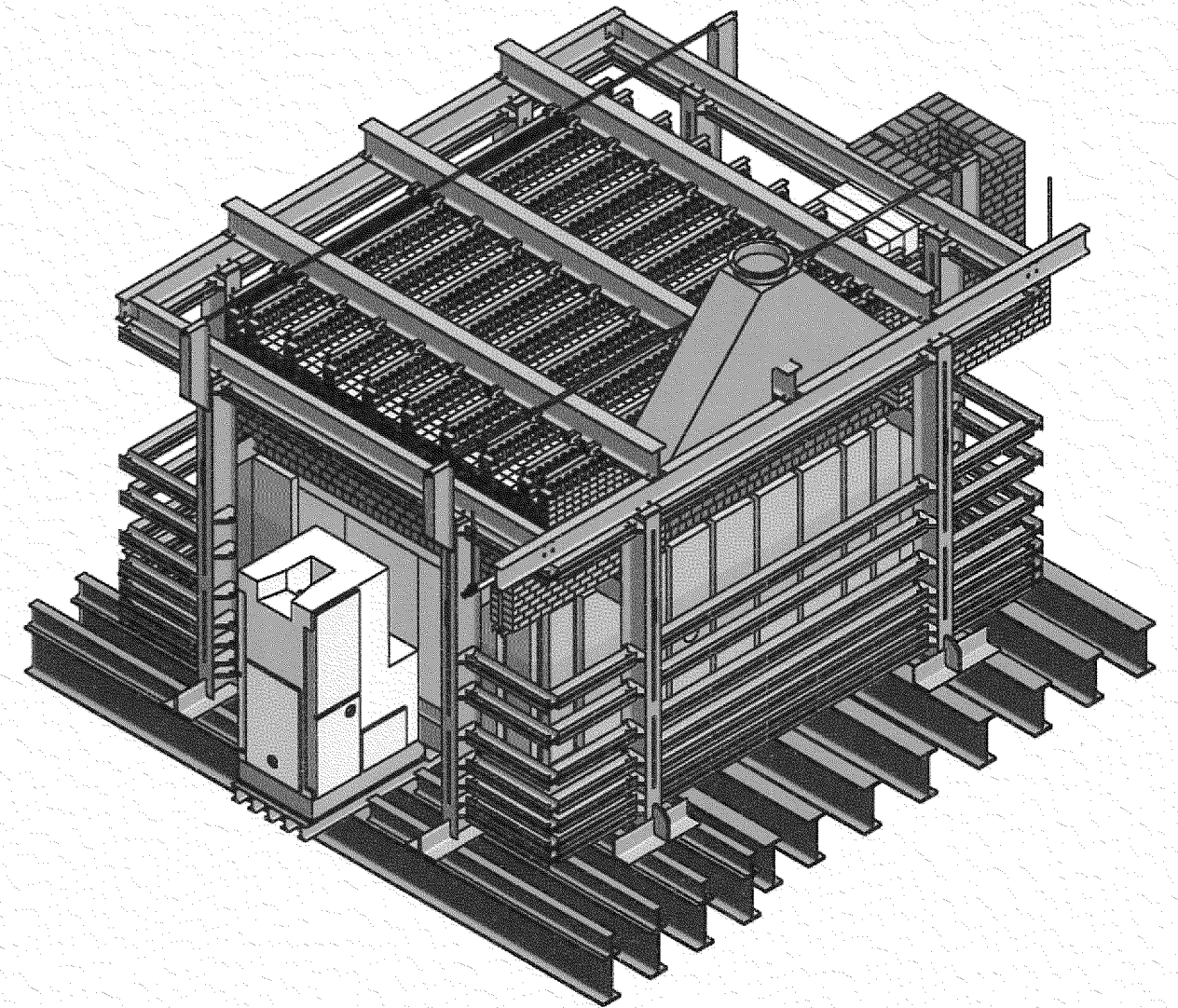
SECTION B-B



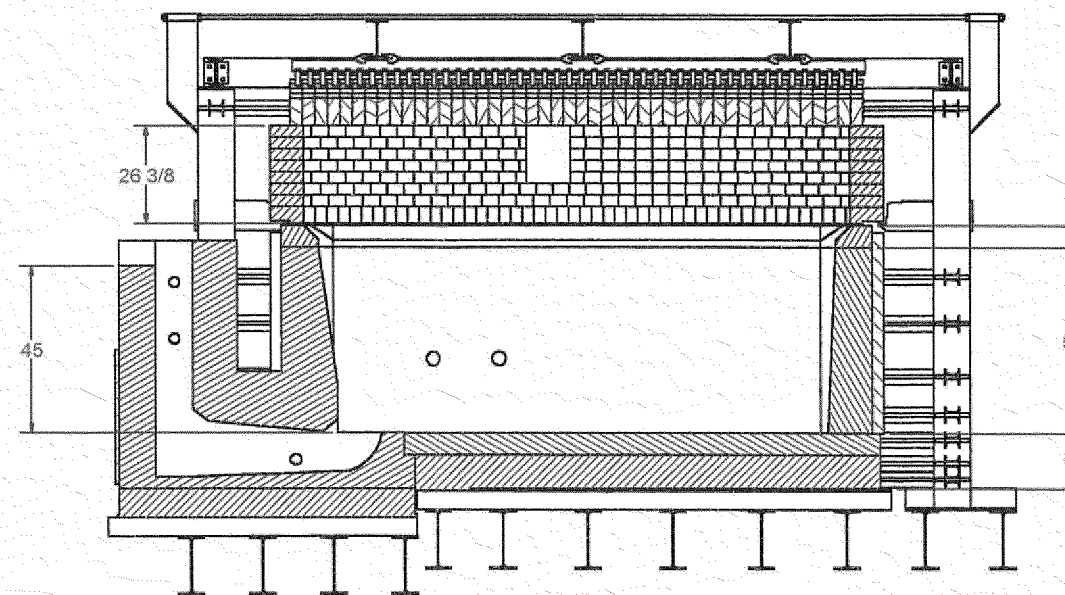
SECTION A-A

Current Furnace Size

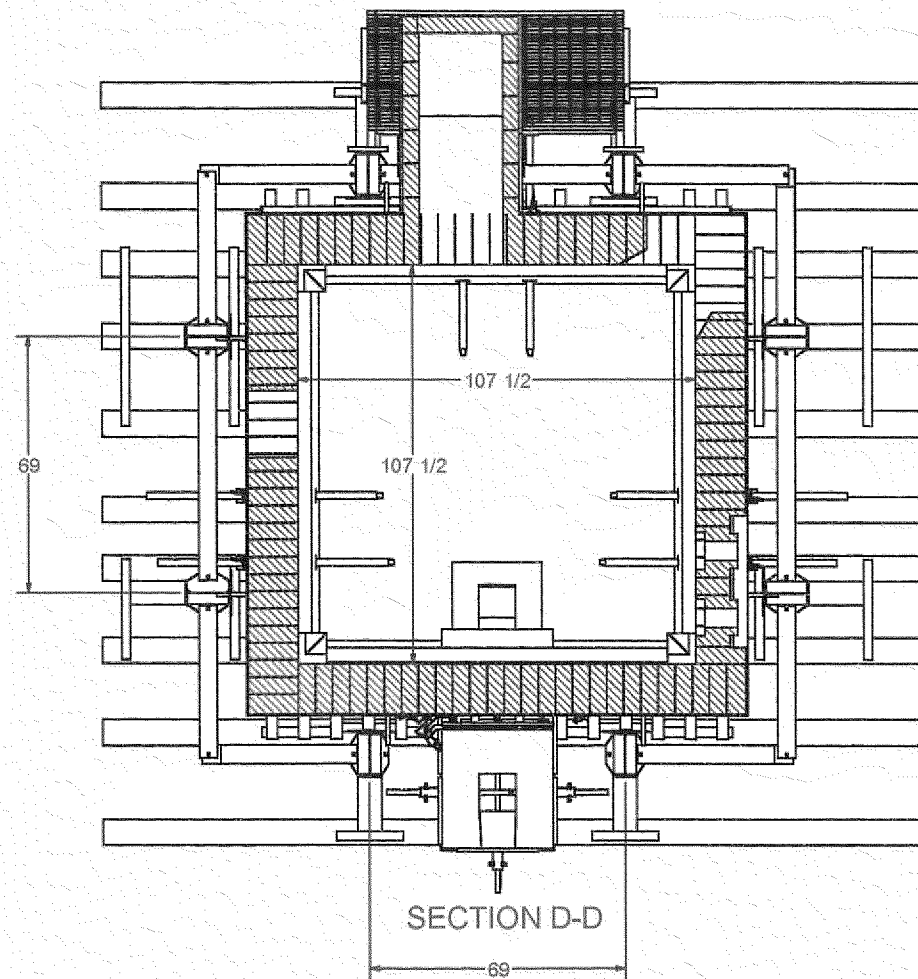
PRELIMINARY
DRAWING



FURNACE #1

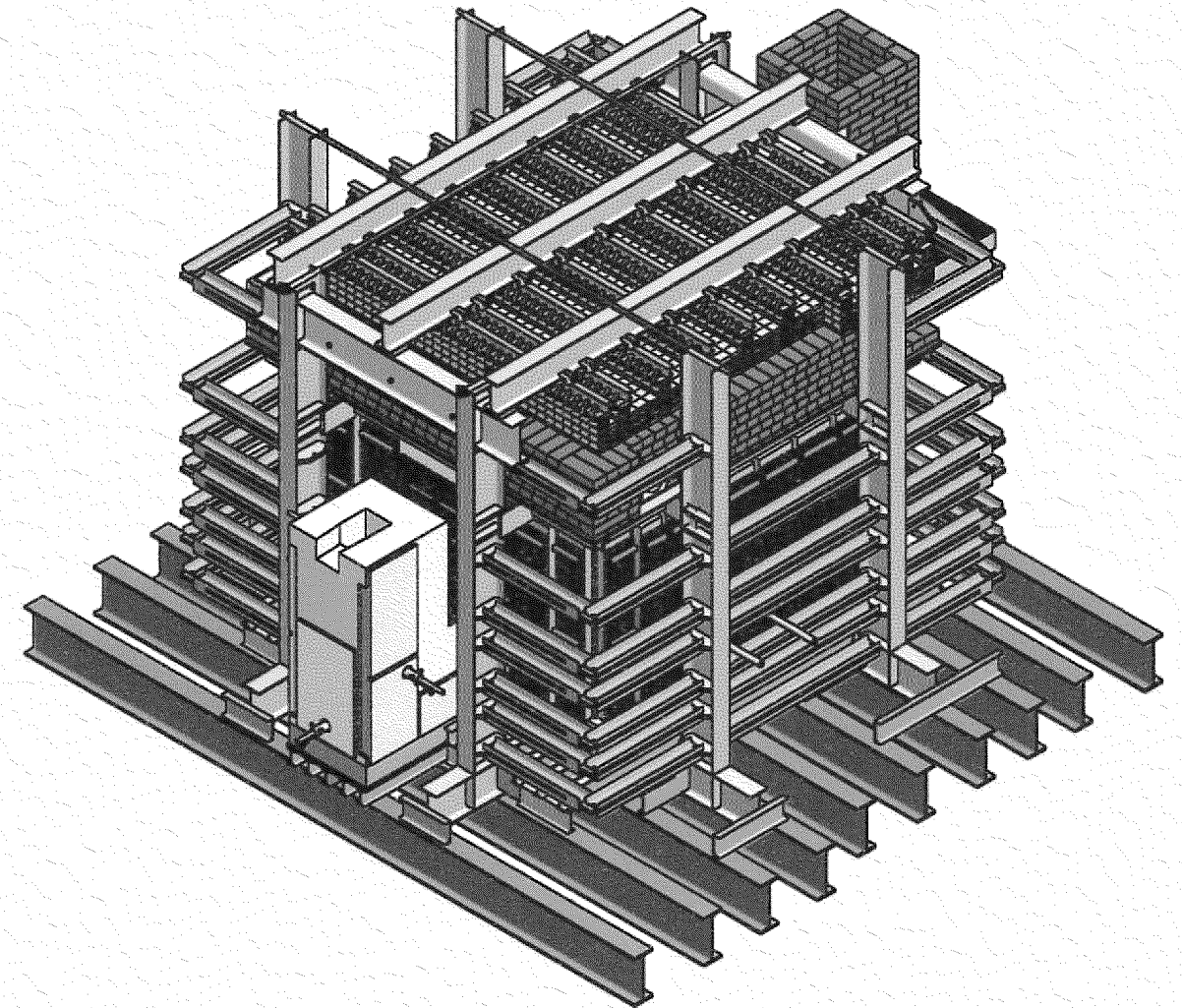


THIS DRAWING AND RELEVANT INFORMATION MUST NOT BE USED IN ANY WAY CONTRARY TO THE INTERESTS OF:		Spectrum Glass Co.		DIMENSIONS: INCHES UNLESS SPECIFIED. OTHERWISE: DECIMALS: XX ± .01 ANGLES: 0°/0' XX ± .05 FRACTIONS: ± 1/32 FINISH: NONE	
F#1 CONVERSION TO F#3					
DESIGNER: Hugo Muñoz	DATE: 1/21/2009	SCALE: DWG#	F1-SK1		SHEET 1 of 2

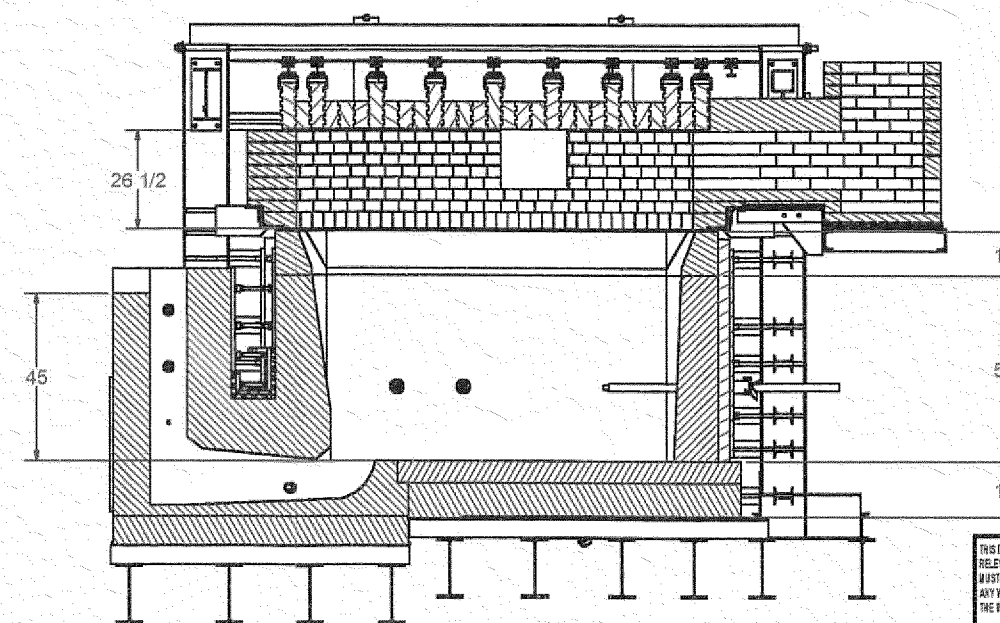
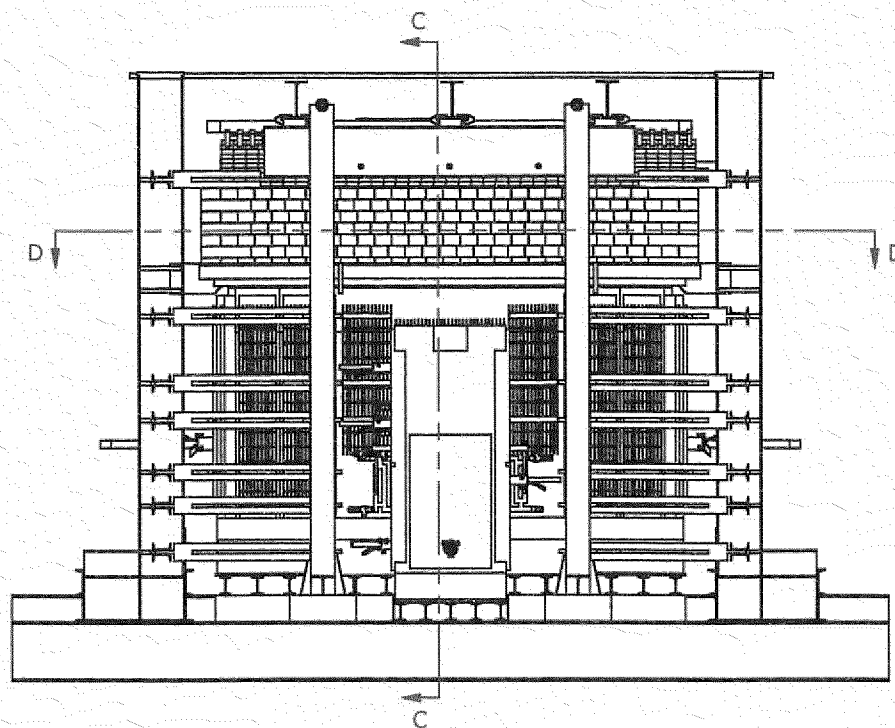


Proposed Furnace Size

PRELIMINARY
DRAWING



FURNACE #3



SECTION C-C

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RELEVANT INFORMATION
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ANY WAY CONTRARY TO
THE INTEREST OF:

 **Spectrum Glass Co.**

DIMENSIONS: INCHES UNLESS SPECIFIED
OTHERWISE
DECIMALS: XX ± .01 ANGLES: 90°
XXX ± .005 FRACTIONS: ± 1/32 FINISH: NONE

F#1 CONVERSION TO F#3

DESIGNER: Hugo Muñoz	DATE: 1/21/2009	SCALE: DWG#	F1-SK1	SHEET 2 of 2	REVISION
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After the melting and refining, the glass melt flows to the **forehearth**, where the glass is then transferred to the forming process. The forehearth cools the molten glass to a working temperature for forming (typically from 2000°F - 2100°F), removes temperature gradients, and provides the means to transfer the molten glass to forming operations. The forehearth consists of an insulated refractory channel and is equipped with burners and an air cooling system on both sides (see Figure 4-2). It can be heated with natural gas or electricity. A natural-gas heated forehearth reheats the cooler surface of the glass using radiant heat transfer, which also serves to equalize temperature gradients. Electrically-heated forehearths use submerged electrodes that heat the glass through conduction and convection.

The length of the forehearth is based on requirements specific to the individual product and the desired heat loss. Control of the glass melt through the forehearth is critical for forming, and the process is highly automated. Controls typically include automated setups, cooling air adjustments and precise zone temperature controls.

Continuous Furnaces Dominate in Larger Glass Plants

While the process of melting and refining is very similar throughout the industry, the type of furnaces used may vary considerably. In general, furnaces are classified as discontinuous or continuous.

Discontinuous Furnaces

Discontinuous furnaces are used in smaller glass melting operations, those on the order of less than five tons per day. Most of these furnaces are used by producers of small blown and pressed tableware, especially colored, crystal and other specialty glasses. They are operated for a short period of time and can usually go through the entire cycle of charging, melting, and removal of molten glass in a single day.

Discontinuous furnaces are either pot furnaces or day tanks. In a **pot furnace**, the glass is melted in a refractory pot inside the furnace, and the pot is externally heated. Pot furnaces may have single or multiple pots, and these may be open or closed. Open pots are open to the flames and gases generated by combustion of the fuel. Open pots have capacities ranging from 250-1000 pounds of glass, and must be operated with fuels that have minimum sulfur content. Few if any open pots are operated in the United States. Closed pots range in capacity from 250-2000 pounds of glass, and are used primarily for melting crystal, lead and colored glasses. Pot furnaces are generally operated to melt glass overnight and permit working of the glass during the day.

Day tanks are small units employing semi-manual operations, and the charging/melting/removal cycle is repeated daily. Day tanks are used for many types of specialty glass, and most commonly for opal, ruby, crystal, and soda-lime glasses. Melting times in these furnaces vary considerably. Soft opal or ruby can be melted in 8-10 hours, where soda-lime glass may take up to 24 hours. Automatic controls keep the melting temperature constant, and the glass melt must be sampled to determine when melting is complete.

Continuous Furnaces

Continuous furnaces are found in larger operations and are designed to be used continuously over a period of years. In the continuous furnace glass levels remain constant, with new batch materials constantly added as molten glass is removed.

Continuous furnaces can be fired by natural gas, electricity, or a combination of both. When both are used, the furnace is said to be fitted with “electric boost.” In natural gas furnaces, the gas is burned in the combustion space above the molten glass and the transfer of energy occurs through radiation and convection. When electricity is the energy source, electrical resistance is introduced using electrodes that are

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Detail shown.

About Spectrum

The Continuous Ribbon Process

During the 1920's, one of the most important technological advances in the history of sheet glass took place: the development of a production process called the "continuous ribbon." This new system took four separate phases of sheet glass production (raw material introduction, melting, sheet forming and annealing) and combined them into one continuous operation, making possible the production of large quantities of glass with very uniform and stable properties. Volume was boosted, costs were lowered, quality was improved, and the continuous ribbon became the heart of modern sheet glass production.

Fifty years later, in 1976, the continuous ribbon was successfully adapted for art glass production. Three Seattle glass lovers with backgrounds in engineering noticed the increasing and unsatisfied demand for art glass. They gambled that it was technologically possible and economically feasible to create multi-colored glass in a continuous ribbon system, integrating old-world methods with modern glass technology. Their success became Spectrum Glass Company.

In the Spectrum process, raw materials are introduced into a tank furnace, displacing existing molten glass and forcing it, stream-like, down a channel called the forehearth. At the end of the forehearth the red-hot liquid pours into a deeper pool, the stirring bay. Continuously moving, the glass flows from the stirring bay through a pair of water-cooled forming rolls, flattening into uniform thickness and becoming an endless ribbon of sheet glass. It is drawn directly into the annealing lehr, passing through a tunnel of 28 individual oven sections, annealing and cooling before emerging and being cut by hand into 48" lengths. This flow of glass from the primary furnace is either an end in itself (a smooth cathedral) or the base glass for the more complex products that Spectrum produces.

Multi-colored glasses are achieved in a fascinating way, using a process that distinguishes Spectrum from all other sheet glass manufacturers. The secondary glass colors are melted in smaller furnaces located on a platform near the forehearth channel. As the base glass flows down the forehearth, one or more secondary glasses are ladled by hand into the stream. Then, at the stirring bay, the different glasses are carefully stirred together by a skilled operator using a hand-held rod.

Of course, both the timing of the ladling and the stirring technique are critical to the end result, and vary for different products. Spectrum's

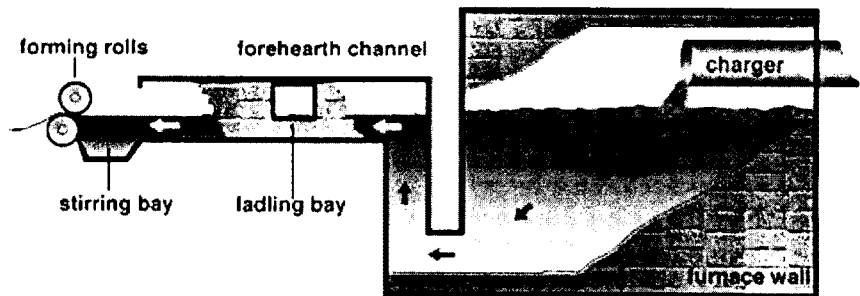
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Virtual Tour

Inside the Furnace

Raw materials from the canisters feed through the Charger into the Furnace, settling on top of glass which is already molten.

Batch entering the Furnace displaces glass which has already melted, forcing it down the Forehearth Channel toward the Sheet Forming Rolls. Glass in the Primary Furnace reaches temperatures up to 2700 degrees Fahrenheit.

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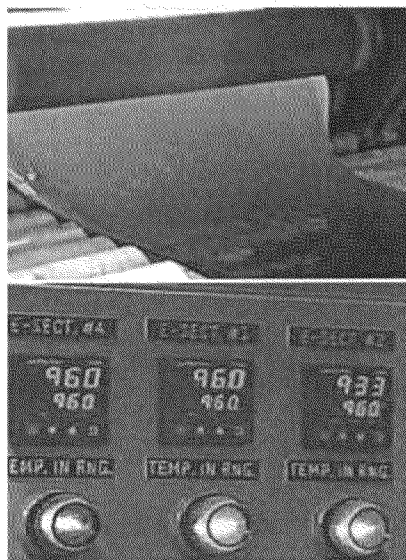
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Virtual Tour

Forming Sheets

Downstream from the Stirring Bay, the glass flows between the two Forming Rolls creating a continuous ribbon of sheet glass.

From there the ribbon moves slowly through the Annealing Lehr, a tunnel of ovens that cools the glass gradually, relieving thermal stress.

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Virtual Tour

Cold End Cutting

The glass exits the Annealing Lehr and moves along into the "cold end" of the plant. All sheets of Spectrum are cut by hand to monitor cutability and insure that each is visually examined by trained personnel.

Throughout the production day glass is put through rigorous testing to insure consistent cutability and quality.

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Detail shown. Full image available in Gallery.

Knowledge Base

Frequently Asked Questions

Products

- What should I do differently when I use SilverCoats™?
- Why did you discontinue that product?
- Do you ever bring back discontinued products?
- Why are some of your products unavailable for extended periods?
- How do you decide on which new products to make?
- Why don't you make a transparent black?
- Can I get a custom color made?
- Can I get every color you make in any texture?
- Do you make glue chip?
- Can I order custom sheet sizes? Extra thick or thin glass?

Product Qualities

- What causes the comet-shaped marks on the surface of some of your opal glasses?
- Why do you call it T-glass?
- What's the best way to cut Waterglass®?
- Why does Baroque cut "differently" than your other glasses?
- Some Spectrum sheets aren't 24 inches wide ... why?
- Why are some Waterglass sheets narrower than 24 inches?
- Why does the Waterglass texture seem to vary somewhat from color to color?
- Is there a front & back side to the glass sheets? How can I tell which is which?
- Why do some products have more seeds than others?

Production

- How do you make Waterglass?
- How do you make Baroque?
- How do you make Iridescent Glass?
- How do you make Ripple Glass?
- How do you make Seedy Glass?
- How do you make Hammered, Granite, Ice Crystal, etc.?
- How are your Gold Pinks made?
- What do you mean by "Continuous" process?
- How do you actually get the color in the glass?

Other

- I bought a sample set awhile back, and it's never been updated like you promised ...
- How can I get my work published?
- Why can't I buy my glass directly from you?
- Do you give tours of the factory?
- Can I get back issues of THE SCORE?
- Can your glass be tempered?
- What do your stock numbers mean? Is there any rhyme or reason to them?
- Do you have patterns available of the glass work you feature on the site or in publications?
- Why don't you label your sheets?

Products

What should I do differently when I use SilverCoats™?

Mirror calls for a little extra care when used in stained glass projects, and SilverCoats are no different. You want to protect the silver coating from chipping during construction and from deterioration over time. Either avoid grinding or use a special mirror bit on your grinder (Mika ME-5F or ME-6F). If it's a copper-foil project, remove flux and patina as soon as possible. Then, remember to use a sealant. Your supplier stocks these inexpensive shellacs (Sprayway Mirror Edge Sealant is a popular brand). Follow the instructions, lightly spraying the edges and back surface of cut pieces. As with all mirrored glass, use a mirror mastic where adhesive is called for. These little precautions will assure that your SilverCoats stay looking brilliant in your projects.

Why did you discontinue that product?

There are any number of reasons why we choose to discontinue a product. It is never a simple decision, and it's always more complex than just "slow sales." There's usually a compounding production-related factor, such that equipment or scheduling limitations, combined with poor demand for the product, lead us to choose to "discontinue" production.

Do you ever bring back discontinued products?

Certainly. There have been many cases of products being reinstated to the standard line. It usually means we've solved the production issues that originally led to its demise and feel demand is strong enough to warrant making it again.

Why are some of your products unavailable for extended periods?

Normally it's due to our inability to accurately predict the future. The nature of our process requires us to run an extended color cycle. That is, the colors must be run in a set sequence, and it takes months to go through the cycle. So, when we make red, for example, we make enough to stock and sell for the entire length of the color cycle—until we get back to red again. Sounds simple enough, but the longer the cycle, the harder it is to accurately predict sales volumes.

At other times, our capacities have been so overburdened that we've chosen to skip certain products in the cycle in favor of others. Knowing that we're going to be out of something, we might choose to produce clear Waterglass® and skip orange. These are tough decisions, and they are extremely rare.

How do you decide on which new products to make?

We listen. Our market research is as sophisticated as chatting with glass users on the phone, at trade shows, and so on. Have some ideas? Needs? Daydreams? Give us a call, or better yet, use your Email!

Why don't you make a transparent black?

Black, by definition, is the absence of light. All light is absorbed. Anything that transmits light wouldn't be black anymore. We could make a very dark gray, but the darker it is, the *less light* it would transmit. Everything's a tradeoff.

Can I get a custom color made?

Probably not, but let's talk about it. On things we have the ability to do, we will do, with a sensible minimum order. For example, customers can order an iridescent coating or a smooth texture where one isn't normally available. But that's quite different from an altogether custom color. Our response to that depends entirely on what the color is, how much you need and your time frame. You'll have to call with specifics to

get a better answer.

Can I get every color you make in any texture?

Not at this writing. Artique, Rough Rolled and Waterglass have broad color selections but generally we limit the production of rolled textures (Hammered, Granite, etc.) to colors that sell well enough to justify carrying the inventory.

Do you make Glue Chip?

No. Glue chip is a cold-glass process, that is, it's a treatment done to glass sheets long after they're produced. Many glue-chip manufacturers do use Spectrum glass, though. See the Dictionary for an explanation of how Glue Chip is made.

Can I order custom sheet sizes?

Extra thick or thin glass? At this writing, we can and often do produce, on special order, sheets of extended length, but not width. We regularly manufacture sheets measuring 24 x 60 to 24 x 72 inches or longer, custom order. Equipment limitations keep us from making sheets wider, however. Same goes for extra thick or extra thin glass, though we have some limited capabilities there. Call for more details.

Product Qualities**What causes the comet-shaped marks on the surface of some of your opal glasses?**

We call them "seed tracks." In some particularly gaseous glass compositions, a bubble will form in the stirring bay (the pool where glasses of different colors are stirred together). That bubble pops as it's drawn through the sheet-forming rolls, creating a "track" on the sheet surface. We make every effort to keep them to a minimum.

Why do you call it "T-Glass?"

When color changes are made in a continuous furnace, there is a transition that must take place between them. Example: In transition from blue to green, various hues of turquoise and teal are created inadvertently. Years ago, we called this "transition glass," or "T-Glass." As time went by, "T-Glass" came to refer to any glass product that falls outside our standard tolerance due to variance in color, texture, mix characteristics, or light transmission.

What's the best way to cut Waterglass®?

Score the glass on the back side (the flatter side) to ensure an even, uniform score. Don't forget to reverse your pattern if you want the wavy side out in the finished project.

Why does Baroque cut "differently" than your other glasses?

Baroque is very unique. In it we mix together two or more glasses of intentionally mis-matched compositions. The glasses, of slightly different expansions, "resist" being mixed together and don't homogenize easily. Thus, the characteristic reamy pattern and high-contrast mixes. Due to the nature of Baroque, the sheets have slightly more internal stress than other Spectrum products. Which means greater care is in order when cutting.

Some Spectrum sheets aren't 24 inches wide ... why?

Sometimes the glass runs narrow, simple as that. Rather than throw it away, we put a few extra sheets in the case to make up any lost square footage to the distributor. Distributors vary in their methods of selling Spectrum sheets that are less than 24 inches wide.

Why are most Waterglass sheets narrower than 24 inches?

The Waterglass® texture is created by stretching the molten glass ribbon as

it exits the sheet-forming rolls. Grasp two ends of anything with some give and stretch it. Gets narrower, right? There 'ya go.

Why does the Waterglass texture seem to vary somewhat from color to color?

Different colors, even different densities of the same color, have different heat-retention properties, and thus, different viscosities at the same stage in the sheet-forming process. These properties directly affect the texture that results when the hot glass ribbons "stretched." We make adjustments aimed at consistency of texture, but you will see some differences on close examination.

Is there a front & back side to the glass sheets?

Absolutely! How can I tell which is which? In some products it's obvious, in others, less so. Generally speaking, the shinier side is the top or front side of the sheet. Rolled textures are always textured on the back side of the sheet.

Why do some products have more seeds than others?

In glasses that aren't intentionally seedy, the seed count and size varies with the nature of the glass composition. Some glasses, notably ambers, champagnes and purples, are naturally more gaseous in nature than others. Gas in the glass equals bubbles in the sheet.

Production**How do you make Waterglass®?**

It is produced by over-stretching the glass ribbon as it emerges from the Forming Rolls, while it is still hot enough to shape. This stretching forms the natural "rippy" Waterglass surface.

How do you make Baroque?

Baroque is a "reamy" glass, whose texture is produced by stirring together two glasses of carefully mismatched compositions. See Cutting Baroque.

How do you make Iridescent Glass?

Immediately downstream from the sheet forming rolls, the hot glass is sprayed with a liquid metallic crystal that bonds to the surface, creating the colorful, shimmering reflections.

How do you make Ripple Glass?

Spectrum Ripple is also a natural texture. We operate the top and bottom forming rolls at different speeds, which sets up a 'jumping' tension between them, causing the dynamic ripple texture to form.

How do you make Seedy Glass?

Compressed air is forced into the molten stream in the forehearth channel. As you might guess, this makes the glass 'bubbly.'

How do you make Hammered, Granite, Ice Crystal, etc.?

These are rolled textures. Their patterns are embossed on the bottom forming roll, which textures the sheet as it passes through.

How are your Gold Pinks made?

We use a pink glass frit made from gold oxide. Frits are color-concentrated glass chips that can be sprinkled into the forehearth and melted right in the molten stream.

What do you mean by "Continuous" process?

The Spectrum process combines the four principle phases of sheet glass production (raw material introduction, melting, sheet forming and annealing) into one continuous process. Base glasses are melted in continuous

furnaces, which are always full of molten glass. Raw materials introduced into the furnaces push molten glass out, forcing it, stream-like, down the forehearth channel, past the ladling bay, where secondary glasses are added by hand, and on to the stirring bay, where the combined glasses are hand-stirred together. Continuously moving, the glass then flows between the sheet-forming rolls and into the annealing tunnel. It's the only process of its kind in the world. Read more.

How do you actually get the color in the glass?

Color is created as part of the basic raw materials. Virtually any metallic oxide creates color in glass. Some of the most common are cobalt (blue), copper (blues & greens), manganese (purples), sulfur (ambers) selenium (reds & oranges), cadmium (yellows), chrome (green), fluorine (white opal) and nickel (gray).

Other**I bought a sample set awhile back, and it's never been updated like you promised ...**

Ahem.... No, really, we make every effort to notify all registered sample set owners for every Sample Set Update. We publish the Update availability in our quarterly newsletter, The SCORE, and here, in our web site. You become a registered owner by returning the postage-paid card that came with your set. Updates normally happen in September, though we've been known to do interim updates during particularly prolific new-product years. Need to bring your Sample Set up-to-date? Refer to Samples for complete information.

How can I get my work published?

We'd love to see your work, and will consider it for publication in The SCORE, other publications, or here in our web site. We've even been known to use unsolicited work for posters and Spectrum T-shirts, or in our trade show display. Remember, though, get good photographs. We see a lot more bad photos of good work than the opposite, and simply can not use them. Incidentally, we also keep photo albums of art work using Spectrum in our offices, and share them with visitors and the like. If you'd like to be represented, just send the shots!

Why can't I buy my glass directly from you?

We make a lot of glass, and have to depend on a distribution system to buy in bulk, break down that bulk, and move it to retailers who take the same job a step further. Every step in the chain serves a critical purpose and meets a critical need. We protect those companies (distributors and retailers) by not selling directly to their customers, because we need them—to accomplish effective, wide-scale distribution of our products.

Do you give tours of the factory?

Every day, no charge. Actually, weekdays only, 8-4. We prefer you call in advance to let us know you're coming, and there are a few guidelines we like to communicate to you in advance (age restrictions, etc.) But the tours are really cool, and everyone enjoys them. Please come -- or take our Virtual Tour.

Can I get back issues of THE SCORE?

Sorry, we don't keep back issues. Here on the web, though, we intend to make past patterns available, as well articles of wide interest. If there's a particular item you need (pattern, article copy) and you don't find it here, contact us—we'll do what we can.

Can your glass be tempered?

Sure, but it might break in the process. Tempering is the process of putting the stress that we've so carefully annealed out of the glass, back into it. Successful tempering depends on the particular glass's ability to stand up to

induced internal stresses. So, fairly simple glasses will temper fairly well (smooth cathedrals) and more complex ones may give you major headaches (Baroque). All you can do is try it on a small scale, experimenting with the tempering process, to find a set of time-temperature relationships that give you acceptable results on the given glass you're trying to temper. Acceptable results would be a rate of loss (breakage) in the tempering process that you could live with. The trial & error process will require close cooperation of the tempering facility you're working with.

Bottom line: art glass of any kind will not temper as dependably (low breakage rate) as float glass, because it's not near as "perfect," or flawless. But it can be done, and is done, fairly frequently. Consider lamination, too, when safety glass requirements need to be met.

What do your stock numbers mean?

Is there any rhyme or reason to them? We'll refer you to our explanation of our system: [Classification](#).

Do you have patterns available of the glass work you feature on the site or in publications?

We have obtained permission to use the images as we have. You need to do so also. Please contact the artist/studio that produced the work.

Why don't you label your sheets?

Good question. There's really only one good reason: we sell to quite a few large-scale manufacturing firms. These companies are real producers, and any added step in their production process costs them time and money. Labeled sheets would mean them taking the time to remove each label, and they are decidedly against it. Segregating our production between labeled & unlabeled, to keep manufacturers from getting labeled product opens up a can of logistical worms that we don't want to touch. One of these days we may find the perfect compromise, but until then....

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From: Owens, Katharine
Importance: Normal
Subject: Spectrum Glass Inspection
Start Date/Time: Wed 2/17/2016 4:00:00 PM
End Date/Time: Thur 2/18/2016 12:00:00 AM

To: Hedgpeth, Zach[Hedgpeth.Zach@epa.gov]
From: McClintock, Katie
Sent: Tue 2/16/2016 3:51:59 PM
Subject: bullseye inspection writeup rough start
[Bullseye Inspection Writeup.docx](#)

Really rough start I just put together.

Katie McClintock

Air Enforcement Officer

EPA Region 10

1200 Sixth Avenue, Suite 900, OCE-101

Seattle, WA 98101

Phone: 206-553-2143

Fax: 206-553-4743

Mcclintock.katie@epa.gov

Inspection of Bullseye Glass
1-10-16

When we arrived at bullseye we learned that Eric Durrin had not received Greg's voicemail so he, John Jones and Dan Schoewerer were across town meeting with their attorneys. They asked us to wait in the conference room until they arrived.

When they arrived we sat down and talked about the process.

FILL THIS IN.

After our discussion we walked through the facility.

We started in the finished good storage area and quickly moved the raw material batch mixing area.

Bullseye has 3 silos for the main silica based raw materials and uses super sacks that are on a platform high in the air for the remaining more common ingredients. Bullseye mixes all batches in plastic 55 gallon drums. When it is time to fill a drum, they move it over to the main scale and then add the right amounts of each ingredient. At the point where the raw materials load into the drum, there is an air intake for the baghouse system. We did not get to see them mix a batch, however, so we could not verify how well it performs. The color is also added at this point by hand (although it is mixed in another room).

The color additives are mixed in a separate room within the facility (no door that I can remember) but a small opening in and out of the room. Inside the employee was wearing a face mask respirator. The colors are stored in ??? and were added to the batch using a slide to start and stop flow. The color is mixed into a small bin. At each slide point, there was an air intake to the baghouse. There was some noticeable dust on the ground but nothing in the air that I noticed. There was a bin labeled "red lead" against the floor under some of the storage sacks and Zach asked about it. Dan seemed horrified and said he had no idea why it was there and that they haven't used that in a very long time.

Once all the color additives are mixed in the color room, the worker brings them out to the main mixing area and adds them to the drum. This is the last stage in the mixing process.

Dan explained there are two ways they mix a batch. They have two large blender mixers. Which are enclosed and vented directly to the baghouse. Once the mixing is finished the batch is put back in the drum. The second system is that they roll the drums sideways. For both, a small amount of water is added to ensure the batch is well mixed and integrated rather than settled out by particle size.

Once the batch is mixed it waits until it is time to add it to the furnace. The amount of water added and the wait time is calculated so that the right moisture content will remain when the batch is added to the furnace.

To add raw materials to the furnace, the drum is lifted and flipped mechanically and fills a screw conveyor which adds the batch to the furnace. Again we did not see this happening but it looked certainly better for dust management than a shoveling system.

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

John O'Donnell
CEO
Kokomo Opalescent Glass
1310 South Market Street
Kokomo, IN 46902

Re: Supplemental Request to Provide Information Pursuant to Section 114 of the Clean Air Act

Dear Mr. O'Donnell,

The enclosed supplemental information request is being issued to you pursuant to Section 114 of the Clean Air Act (CAA), 42 U.S.C. § 7414. The Environmental Protection Agency is seeking additional information concerning Kokomo Opalescent Glass' facility in Kokomo, IN.

Under Section 114 of the CAA, EPA is authorized to require the submission of records, reports, and other information for the purpose of determining whether any violations of the CAA have occurred. In accordance with this authority, you are hereby served the enclosed Information Request, and required to provide the requested responses and documents within seven (7) days of receipt of this Request for questions 1-8. Provide the remaining responses within (30) days of receipt of this Request. See Enclosures 1 and 2 for the instructions, definitions, and Information Requests.

You must submit a copy of the full response to:

Sara Froikin
Stationary Source Enforcement Branch
Air Enforcement Division
U.S. Environmental Protection Agency
SARA's ADDRESS

Katie McClintock
EPA Region 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101

Regional contact

Commented [KM1]: Should I just represent oeca here. I would love to get a copy and I think it makes sense in the short term for me to the person the companies consult on technical questions on the 114.

Commented [KM2]: Having them send to everyone means we don't have transmit cbi.

Failure to provide the required information in a timely manner may lead to civil action to obtain compliance or to recover a civil penalty in accordance with Section 113 of the CAA, 42 U.S.C. § 7413. EPA also has authority to seek criminal penalties from any person who knowingly makes any false statement, representation, or certification. Even if you fully comply with this letter, you may still be subject to administrative, civil, or criminal action as provided by the CAA.

You are entitled to assert a claim of business confidentiality, covering all or any required information, in the manner described at 40 C.F.R. § 2.203(b). See Enclosure 3 for instructions on assertion of business confidentiality claims. Note that emissions data, which includes information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of emission data, is not entitled to confidential treatment. Information subject to a claim of business confidentiality will be made available to the public only in accordance with the procedures set forth at 40 C.F.R. Part 2, Subpart B. Unless a confidentiality claim is asserted at the time the required information is provided, EPA may make this information available to the public without further notice to you.

This required submission of information is not subject to the approval requirements of the Paperwork Reduction Act of 1980, 44 U.S.C. §§ 3501, et seq.

Any technical questions regarding this Information Request should be directed to Katie McClintock, Office of Civil Enforcement, at (206) 553-2143, mcclintock.katie@epa.gov; for legal matters, contact Sara Froikin, Office of Civil Enforcement, at (202) 564-5805, Froikin.sara@epa.gov

Sincerely,

Phillip A. Brooks, Director
Air Enforcement Division

Enclosures (3)

cc: regional contact
Katie McClintock, EPA
Sara Froikin, EPA

ENCLOSURE 1

A. INSTRUCTIONS:

- 1) Please provide a separate narrative response to each Information Request and subpart of an Information Request set forth in Enclosure 2 of this Information Request and precede each answer with the number of the Information Request to which it corresponds.
- 2) For each Information Request, identify each person responding to any Information Request contained in this Information Request on your behalf, as well as each person consulted in the preparation of a response.
- 3) For each Information Request, identify each document consulted, examined, or referred to in the preparation of the response or that contains information responsive to the Information Request, and provide a true and correct copy of each such document if not provided in response to another specific Information Request. Indicate on each document produced in response to this Information Request the number of the Information Request to which it corresponds.
- 4) If requested information or documents are not known or are not available to you at the time of your response to this Information Request, but later become known or available to you, you must supplement your response to EPA. Moreover, should you find at any time after submission of your response that any portion is or becomes false, incomplete, or misrepresents the facts; you must provide EPA with a corrected response as soon as possible.
- 5) Requested information can be submitted in electronic form if applicable.

For purposes of this Information Request, the definitions set forth in Section B shall apply and should be considered carefully by you in preparing your responses.

B. DEFINITIONS:

- 1) "Document" means written documentation of any kind, including documentation solely in electronic form. It includes any document in the possession or control of Kokomo Opalescent Glass or the possession or control of any person or entity hired by Kokomo Opalescent Glass. A copy of a document rather than the original may be provided.

- 2) "Facility" means the Kokomo Opalescent Glass facility in Kokomo, Indiana.
- 3) The terms "person" or "persons" shall have the meaning set forth in Section 302(e) of the Act, 42 U.S.C. § 7602(e), and include an individual, corporation, partnership, association, State, municipality, political subdivision of a State, and any agency, department, or instrumentality of the United States and any officer, agent or employee thereof.
- 4) The terms "you" or "your", as used above and in each Information Request set forth in Enclosure 2 of this Information Request, refer to, and shall mean, Kokomo Opalescent Glass, including its subsidiaries, divisions, affiliates, predecessors, successors, assigns, and its former and present officers, directors, agents, employees, representatives, attorneys, consultants, accountants and all other persons acting on its behalf.

ENCLOSURE 2

INFORMATION REQUEST

You are hereby required, in accordance with Section 114(a) of the Act, 42 U.S.C. § 7414(a), to provide the following information regarding the Facility.

1. Provide a facility plot plan or diagram of the Facility and a narrative description of the process. Both should include, but are not be limited to, all sources of emissions to the atmosphere, each glass melting furnace, batch mixing, pollution control devices, glass sheet reheating, annealing lehrs, frit processing, and other units that support glass production. Do not include electric kilns in a studio for work with finished glass product.
2. Provide a narrative description to accompany the above facility diagram including the entire process from the receipt of raw materials to the crushing of finished glass.
3. Provide a list of each glass melting furnace currently operating at the Facility.
4. For each furnace identified in response to Question 3, provide the following information:
 - a. The type of the furnace (e.g., regenerative, recuperative, oxyfuel, electric);
 - b. A schematic of the furnace including the tank size, burner position and exhaust points;
 - c. A description of the furnace operation including how often the furnace is cooled down to ambient temperatures;
 - d. For furnaces that pull glass out continuously, provide:
 - i. The maximum pull of the furnace (tons/hr);
 - ii. The holding capacity of the furnace (lbs);
 - iii. The maximum pull of the furnace (tons/yr);
 - e. For furnaces that melt glass in a batch process, provide:
 - i. The maximum holding capacity of the furnace (lbs);
 - ii. The maximum and minimum times between the start of two consecutive melts.
 - iii. The calculated maximum annual production (tpy) and explanation of the calculation;
5. Annual production (tpy) from each furnace for the last 5 years.

Commented [KM3]: Not about nsr, just want an idea of normal throughput. We still won't get an idea of more max capacity unless we go back per 2008.

6. Provide a copy of the current air permit for the facility (if applicable) and the engineering support document.
7. A list of all raw materials used at the facility in the last 3 years and MSDS for each.
8. Provide purchase invoices for all compounds containing chromium, cadmium, arsenic, nickel and lead for the past 3 years.
9. A complete list of all batch recipes that the company has made in the last 3 years.
10. Daily bath records for the last year. For each batch indicate the date and furnace number as well as the complete ingredient list and quantity.
11. For each furnace identified in response to question 3, provide:
 - a. An explanation of how raw materials are charged into the furnace;
 - b. The fuel fired in each furnace and the maximum firing rate (mmbtu/hr) combined for the burners in the furnace.
 - c. The amount of electricity used to melt glass, if used.
 - d. The date the furnace began operation;
 - e. Any dates after 1986 that the Furnace was converted from air to oxyfuel, enlarged in size, or modified to increase air emissions. Provide the date of the project, a description of the project, and the effect on emissions and production.
 - f. The dates of the last rebricking on the furnace.
 - g. An explanation of whether the furnace has been cooled to ambient temperature for a reason other than maintenance, malfunction, control device installation, reconstruction or rebuilding in the last 5 years? If so explain the date, the reason, and the length of time the furnace was at ambient temperature.

Commented [KM4]: A sense of historic emissions.

Commented [KM5]: Batch melters don't use because they wouldn't stay submerged.

Commented [KM6]: Part 61 subpart N date

12. For each furnace identified in response to question 3, identify and describe any combustion or post-combustion controls that are used for any reason. For each, provide the following information and provide data to support the answers:
 - a. The reason the equipment was installed, the date of the installation and the pollutant(s) the equipment is designed to reduce.
 - b. Describe in detail how emission control equipment or reduction practice limits air emissions from each source, and how effectively (in terms of removal efficiency, capture efficiency, distribution efficiency, etc.) each air emission is limited by the corresponding equipment or practice.
 - c. Any engineering documents for the control device regarding the performance of the controls device.
 - d. Any engineering document for the capture system associated with the control device.
 - e. If there is any monitoring of the device (temperature, pressure, etc) that is a parameter for performance, provide the source test establishing the parameter and the last year of records of that parameter.

13. Is the facility subject to Part 61, Subpart N? If so, provide the following records for the last two years:
 - a. Annual emissions of arsenic from each furnace.
 - b. All records required under 40 C.F.R. § 61.165.
14. Is the facility subject to Part 63, Subpart SSSSSS. If no furnaces are subject, explain for each why it is not subject. For any units that are subject provide a copy of the notifications required under 40 C.F.R. § 63.11456 and the last two years of records required under 40 C.F.R § 63.11457
15. For raw material handling, provide a schematic of the batch mixing setup including the original batch mixing, mixing of the colorants, transfer of the batch to the blender, blending of the batch, transfer of the batch out of the blender, and charging the raw materials into the furnace. For each point, provide an explanation of any air pollution capture system, flow rates if known, and any design of the rooms/air system to limit dust creation. For each collection system, provide the total flow rates for each intake and the design flow rate of the system.
16. Does the Facility crush glass to sell as frit or for other disposal? If yes, provide a detailed schematic of the crushing operation. For each point of emissions in the process, provide an explanation of any air pollution capture efforts at that point including an explanation and drawing of the capture system. If the frit process is enclosed in any larger room, explain how this is done, openings to the larger factory and whether the room exhaust is vented to a control device. For the collection system, provide the total flow rates for each intake and the design flow rate of the system.
17. Does the facility spray any coatings on the glass? If so, describe the process in detail, the chemicals sprayed along with their Material Safety Data Sheets, the quantity of each chemical used each year for the last 3 years, a description of emissions from the process (including a description of any visible emissions during coating) and a description of any emissions capture/control system.
18. For each baghouse, explain what is done with the baghouse dust. If the dust is melted onsite, explain where it is stored before melting, which furnace it is melted in, the frequency of the melting and what is done with the glass after melting.
19. Provide copies of each stack emissions test conducted on each furnace or baghouse stack since 1990. This request includes tests done to determine compliance with permits or regulatory standards, engineering tests, and tests for general information. Provide the batch records for all glasses made in furnaces route into the furnace or batches mixed/blended that were routed into the baghouse.
20. Provide information on the refractory the Facility uses in their furnaces both for the tanks of the furnaces and the superstructure. If the Facility uses different refractory in different furnaces, provide information on the refractory products used in each furnace. For each

refractory, provide the MSDS from the manufacturer and an invoice. If the facility uses the same refractory in each tank and superstructure, provide invoices since January 1, 2014.

21. For each furnace that measures temperature inside of the furnace, provide:
- a. The point where the temperature is measured;
 - b. Temperature readings for the last year (on the frequency recorded) in spreadsheet format.

ENCLOSURE 3

CONFIDENTIAL BUSINESS INFORMATION ASSERTION AND SUBSTANTIATION REQUIREMENTS

A. Assertion Requirements

You may assert a business confidentiality claim covering all or part of the information requested in response to this information request, as provided in 40 C.F.R. Section 2.203(b). You may assert a business confidentiality claim covering such information by placing on (or attaching to) the information you desire to assert a confidentiality claim, at the time it is submitted to the EPA, a cover sheet, stamped, or typed legend (or other suitable form of notice) employing language such as "trade secret" or "proprietary" or "company confidential." Allegedly confidential portions of otherwise non-confidential documents should be clearly identified, and may be submitted separately to facilitate identification and handling by the EPA. If you desire confidential treatment only until a certain date or until the occurrence of a certain event, the notice should so state. Information covered by such a claim will be disclosed by the EPA only to the extent, and by means of the procedures, set forth in Section 114(c) of the Clean Air Act (the Act) and 40 C.F.R. Part 2. The EPA will construe the failure to furnish a confidentiality claim with your response to the attached letter as a waiver of that claim, and the information may be made available to the public without further notice to you.

B. Substantiation Requirements

All confidentiality claims are subject to the EPA verification in accordance with 40 C.F.R. Part 2, subpart B. The criteria for determining whether material claimed as confidential is entitled to such treatment are set forth at 40 C.F.R. Sections 2.208 and 2.301, which provide, in part, that you must satisfactorily show that you have taken reasonable measures to protect the confidentiality of the information and that you intend to continue to do so; that the information is not and has not been reasonably obtainable by legitimate means without your consent; and the disclosure of the information is likely to cause substantial harm to your business's competitive edge.

Pursuant to 40 C.F.R. Part 2, subpart B, the EPA may at any time send you a letter asking you to substantiate fully your CBI claim. If you receive such a letter, you must provide the EPA with a response within the number of days set forth in the EPA request letter. Failure to submit your comments within that time would be regarded as a waiver of your confidentiality claim or

claims, and the EPA may release the information. If you receive such a letter, the EPA will ask you to specify which portions of the information you consider confidential. You must be specific by page, paragraph, and sentence when identifying the information subject to your claim. Any information not specifically identified as subject to a confidentiality claim may be disclosed without further notice to you. For each item or class of information that you identify as being subject to CBI, you must answer the following questions, giving as much detail as possible, in accordance with 40 C.F.R. 2.204(e):

1. What specific portions of the information are alleged to be entitled to confidential treatment? For what period of time do you request that the information be maintained as confidential, until a certain date, until the occurrence of a specified event, or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, please specify that event.
2. Information submitted to the EPA becomes stale over time. Why should the information you claim as confidential be protected for the time period specified in your answer to question #1?
3. What measures have you taken to protect the information claimed as confidential? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
4. Is the information contained in any publicly available material such as the Internet, publicly available databases, promotional publications, annual reports, or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
5. Has any governmental body made a determination as to the confidentiality of the information? If so, please attach a copy of the determination.
6. For each category of information claimed as confidential, explain with specificity why release of the information is likely to cause substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as substantial, and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?
7. Do you assert that the information is submitted on a voluntary or a mandatory basis? Please explain the reason for your assertion. If you assert that the information is voluntarily submitted information, explain whether and why disclosure of the information would tend to lessen the availability to the EPA of similar information in the future.
8. Any other issue you deem relevant.

Please note that emission data provided under Section 114 of the Act, 42 U.S.C. Section 7414, is not entitled to confidential treatment under 40 C.F.R. Part 2, subpart B.

Emission data means, with reference to any source of emission of any substance into the air:

(A) Information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of any emission which has been emitted by the source (or of any pollutant resulting from any emission by the source), or any combination of the foregoing;

(B) Information necessary to determine the identity, amount, frequency, concentration, or other characteristics (to the extent related to air quality) of the emissions which, under an applicable standard or limitation, the source was authorized to emit (including, to the extent necessary for such purposes, a description of the manner and rate of operation of the source); and

(C) A general description of the location and/or nature of the source to the extent necessary to identify the source and to distinguish it from other sources (including, to the extent necessary for such purposes, a description of the device, installation, or operation constituting the source).

40 C.F.R. Sections 2.301(a)(2)(i)(A), (B) and (C).

If you receive a request for a substantiation letter from the EPA, you bear the burden of substantiating your confidentiality claim. Conclusory allegations will be given little or no weight in the determination. If you fail to claim the information as confidential, it may be made available to the public without further notice to you.

Kokomo –

Adjust 114 based on 12 pot furnace and poor raw materials handling. They use bichromate.

<https://www.youtube.com/watch?v=LRUqZDi306E>

This 2011 video shows:

- No dust capture on mixing batch. No dust protection on workers.
- Color is added to glass using a variety of metals including “cadmium and bichromate.”

<https://www.youtube.com/watch?v=tDyeiePort0>

- This facility has an odd 12-pot furnace. It has 12 clay pots inside but is heated commonly. No idea how it works inside.
- I think they may have a few traditional furnaces as well based on one of the videos with the current owner.
- It makes a double size sheet of glass per each roll compared to uroboros and bullseye (but looks like only running one annealing lehr).
- Poor condition of refractory. Since doesn’t contact glass, they could use a variety of refractories, including chromium. Not sure how the head is added in here but clearly a lot of heat is getting to the external refractory:

<https://www.youtube.com/watch?v=KaUtexpYcOo>

Only 300 sheets a day from the 12 pot furnace

<https://www.youtube.com/watch?v=Gxkw5KfQezo>

Review of the other glass companies: 2/15/16

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The Big Players in the Color Glass Industry:

- Bullseye Glass Company – Portland, OR
- Uroboros Glass – Portland, OR
- Spectrum Glass Company – Woodinville, WA
 - System 96 – Woodinville, WA (collab btwn spectrum and uroboros)
- Kokomo Opalescent Glass – Kokomo, IN
- The Paul Wissmach Glass Company – Paden City, WV
- Youghiogheny Opalescent Glass company – Connellsville, PA
- Armstrong Glass – Kennesaw, GA

Other information:

- The concern here is ambient impacts at sustained high levels. As a result, the facility surroundings are important both in terms of residences but also schools where a larger population is spending many hours a day near the facilities.
 - Bullseye, Kokomo, Youghiogheny, Armstrong – All in neighborhoods with very close houses. Bullseye is very close to schools. Haven't investigated others.
 - Uroboros and Spectrum are a little farther from houses, but both are within a quarter mile of a school.
 - Wissmach seems to be about a half mile from anything.

Completed/ongoing actions:

- Region 10 has inspected Uroboros and Bullseye and will inspect Spectrum/System 96 on Wednesday 2/17. We have requested records from each regarding raw material usages, temperatures, and refractories.
- Uroboros and Bullseye have suspended use of cadmium, arsenic and hexavalent chromium.

Next steps:

- Decide how to investigate. Options include (in order of what I recommend):
 - Phone calls by EPA – Potential for very effective quick source of information but is not traditional. Could allow us to request msds, learn about controls, and understand facility/furnace design.
 - Inspections by EPA – Could be effective. Would be most effective if Zach Hedgpeth and Katie McClintock could go to compare based on what we know of other factories however Regional staff could go after conference calls with Region 10 staff.
 - Information Request – This could be combined with other efforts. Potentially after a phone conversation. A draft is attached. If we only send this, will take a while for the company to gather information and we will get less of a good picture of the process from words only.
 - Inspections by State – This could be useful but the states probably know very little about this and may not want to get caught up in this in the first step.
- Ambient monitoring –
 - Deploying ambient monitoring as soon as possible if they are available would allow EPA

Enforcement Confidential, pre-decisional

to act appropriately and respond to any community concerns. OR has developed ambient monitoring plans that we could probably work from.

- Especially relevant for trivalent chromium raw materials where there is little literature on the percent conversion in the furnace temperature/atmosphere.
- Other concerns –
 - OSHA – dust handling can raise issues. Kokomo's 2011 video was very concerning, but many years have passed.
 - Soil sampling. Soil samples have been positive in Portland.
 - RCRA and Water issues have come up in the past at Spectrum.

To: McClintock, Katie[McClintock.Katie@epa.gov]; Brian Renninger[BrianR@psc Clean Air.org]
Cc: Hedgpeth, Zach[Hedgpeth.Zach@epa.gov]
From: John Schantz
Sent: Fri 2/12/2016 11:22:09 PM
Subject: RE: Next Week Spectrum Glass

Hi Katie- I'm also looking forward to visiting Spectrum on Wednesday. I'm booked up on Tuesday morning, so I'm hoping we can schedule the chat for early afternoon.

Thanks- John

From: McClintock, Katie [mailto:McClintock.Katie@epa.gov]
Sent: Friday, February 12, 2016 3:08 PM
To: Brian Renninger
Cc: Hedgpeth, Zach; John Schantz
Subject: RE: Next Week Spectrum Glass

Great. Look forward to it. I'll set up a time on Tuesday for us to chat for 30 minutes to make sure we are on the same page before the inspection Wednesday at 9:30 am.

From: Brian Renninger [mailto:BrianR@psc Clean Air.org]
Sent: Friday, February 12, 2016 3:07 PM
To: McClintock, Katie <McClintock.Katie@epa.gov>
Cc: Hedgpeth, Zach <Hedgpeth.Zach@epa.gov>; John Schantz <JohnS@psc Clean Air.org>
Subject: Next Week Spectrum Glass

I spoke with the Agency Inspector John Schantz and he is up for an inspection on Wednesday. He will also be in the office on Tuesday if you would like to meet or have a telephone call I'm free all day Tuesday except between 3 and 4 pm?

I have also attached the Agency Evaluation Report for the facility. This is what an inspector would have with them during an inspection. It lists: identifying information; required safety equipment; brief summaries of recent inspections and recent NOVs; lists each active Order of Approval and their conditions; and has a list of equipment for the facility. It might be useful for familiarizing yourself with the facility.

Sincerely,

Brian Renninger, P.E.

Engineer

Puget Sound Clean Air Agency

206.689.4077

brianr@pscleanair.org

1904 Third Avenue, Suite 105

Seattle, WA 98101

"Working together for clean air"

www.pscleanair.org

To: Brian Renninger[BrianR@pscleanair.org]
Cc: Hedgpeth, Zach[Hedgpeth.Zach@epa.gov]; John Schantz[JohnS@pscleanair.org]
From: McClintock, Katie
Sent: Fri 2/12/2016 11:08:16 PM
Subject: RE: Next Week Spectrum Glass

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From: Brian Renninger [mailto:BrianR@pscleanair.org]
Sent: Friday, February 12, 2016 3:07 PM
To: McClintock, Katie <McClintock.Katie@epa.gov>
Cc: Hedgpeth, Zach <Hedgpeth.Zach@epa.gov>; John Schantz <JohnS@pscleanair.org>
Subject: Next Week Spectrum Glass

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To: McClintock, Katie[McClintock.Katie@epa.gov]
Cc: Hedgpeth, Zach[Hedgpeth.Zach@epa.gov]; John Schantz[JohnS@pscleanair.org]
From: Brian Renninger
Sent: Fri 2/12/2016 11:06:48 PM
Subject: Next Week Spectrum Glass
Spectrum Glass 14107.pdf

I spoke with the Agency Inspector John Schantz and he is up for an inspection on Wednesday. He will also be in the office on Tuesday if you would like to meet or have a telephone call I'm free all day Tuesday except between 3 and 4 pm?

I have also attached the Agency Evaluation Report for the facility. This is what an inspector would have with them during an inspection. It lists: identifying information; required safety equipment; brief summaries of recent inspections and recent NOVs; lists each active Order of Approval and their conditions; and has a list of equipment for the facility. It might be useful for familiarizing yourself with the facility.

Sincerely,

Brian Renninger, P.E.

Engineer

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Activity Record

Employee	Initials	Date Completed
1.		
2.		
3.		
4.		

Puget Sound Clean Air Agency
1904 3rd Ave, Ste 105
Seattle, WA 98101-3317

Evaluation Report

Reg #: 14107
EPA?: Yes
Status: Active

40 CFR Part 60 CC

Facility: Spectrum Glass Co Inc
Physical Address: 24105 Snohomish-Woodinville Rd
Woodinville 98072
Invoice Address: PO Box 646
Woodinville WA 98072-0646

Personal Protective Equipment Checklist

Determined by Inspector based on
Compliance Manual Policy 101

<u>Worn</u>	<u>Safety Equipment</u>	<u>Req/Op</u>
<input type="checkbox"/>	None	_____
<input type="checkbox"/>	Hard Hat	_____
<input type="checkbox"/>	Goggles	_____
<input type="checkbox"/>	Safety Glasses	R
<input type="checkbox"/>	Hearing Protection	R
<input type="checkbox"/>	Respirator	_____
<input type="checkbox"/>	Safety Shoes	R
<input type="checkbox"/>	Rubber Boots	_____
<input type="checkbox"/>	Leather Gloves	_____
<input type="checkbox"/>	Chemical Gloves	_____
<input type="checkbox"/>	Coveralls	_____
<input type="checkbox"/>	Tyvek	_____
<input type="checkbox"/>	Safety Vest	_____
<input type="checkbox"/>	Other	_____

Inspector **JSS** Engineer **BTR**

Last Onsite Compliance **10/16/2013**

Contacted

☐ Kyle Barker, President (425) 483-6699
☐ Glenn Yablecki, Plant Engineer (425) 483-6699
☐ Monica Pillay, Glass Engineer (425) 483-6699 x4040
☐ Brandon Byhre, Technology Engineer (425) 483-6699 4065

PhoneFaxE-mail

North American Industrial Classification System (NAICS): 327211 - Flat Glass Manufacturing

Evaluation Date: _____ Clean Air Reps: _____

Evaluation Type: ☐ Onsite Compliance ☐ Onsite Observation ☐ Follow-up

Evaluation Summary: _____

Updates: ☐ AOD ☐ Equipment ☐ NOC ☐ Operating Status ☐ Owner/Name ☐ CFR Change ☐ Other

Attachments: _____

NOV/WW # Issued: _____

Other Action: _____

Evaluation Prepared by: _____

Date: _____

Onsite Compliance Evaluations (Last 3)

Eval Date	Inspector	Inspector	Notes	NOV/WW
10/16/2013	JSS		Visible emission from baghouse exhaust observed. Spectrum Glass advised in-person. Corrective action taken immediately.	
07/11/2013	JSS	WT	W W 2-009012 Compliance Evaluation. Acceptable pressure drop range not posted on or near Gauges for silos 12 & 13 as required: OA 6689 cond 4.	2-009012
01/30/2012	JSS		CSR - no deficiencies. Routine evaluation.	

Onsite Observation Evaluations (Last 3) - None

Offsite Report Evaluations (Last 18 Months) - None

Onsite Complaint Evaluations (Last 3)

Eval Date	Inspector	Inspector	Case#	Case Type	NOV/WW
03/08/2006	JSS		2006500096	Dust/Fallout	
09/22/1994	EMG		94500993	Dust/Fallout	

Violation History (Last 2 Years) - None

Open AOD Conditions - None

Notices of Construction / Notifications Evaluation Pending - None

Notices of Construction / Notifications

Inactive?	NOC / Notice #		Approved	Evaluated
BTR initials				
<u> </u>	1891	Glass Manufacturing	01/03/1979	07/19/2005
		Installation Address:		
		Woodinville WA, WA		
<u> </u>	2093	Dust Collection System	05/15/1980	07/19/2005
<u> </u>	2871	Furnace #3	02/20/1987	07/19/2005
<u> </u>	2981	Daytank E Melting Furnace	10/30/1987	07/19/2005
<u> </u>	3101	Irridized Glass Prod & Control	07/19/1988	01/31/1992
		Conditions		
		1. Spectrum Glass shall not emit more than 0.8 lb/hr of methylene chloride from this process.		
		2. Spectrum Glass shall submit a copy of any emission tests relating to this process.		
		Description		
		One Irridized Glass Process with two spray hoods, one Eclipse Incini one #136IC, one SFC Model 15 Dry Scrubber and ond Donaldson-Day Model 60HPT Hybred Pulsejet 6000 cfm (155F)		
<u> </u>	3228	Glass Furnace #2	05/16/1989	10/17/1989
		Description		
		One Spectrum Glass Co No. 2 Single Phase Glass Furnace, 5TPD Capacity, 90i x 78i x 24i, gas (6 MMBH) and electric heated		
<u> </u>	5626	3 Baghouses	11/30/1994	07/19/2005
		Conditions		
		4. Spectrum Glass Co Inc. shall not allow the emissions from the Torit baghouses to exceed: (a) 0.01 gr/dscf measured by PSACA approved particulate source test methods, and (b) 10% opacity for a period or periods aggregating more than 3 minutes in any one hour.		
		Description		
		Three Torit TD 486 Bin Vents at 1,350 cfm each.		

Notices of Construction / Notifications

<i>Inactive?</i> <i>BTR initials</i>	<i>NOC / Notice #</i>		<i>Approved</i>	<i>Evaluated</i>
<u> </u>	6497	5 Furnaces & 2 Baghouses	09/06/1996	07/19/2005
		Conditions		
		4. Gauges to measure the pressure drop across the baghouses for Furnace #4 and #5 will be installed and maintained. Within 90 days after beginning equipment operation, the acceptable ranges for the gauges will be clearly marked on or nearby the gauges.		
		5. There shall be no visible emissions from the baghouses.		
		6. PM10 emissions from all baghouse exhaust shall not exceed 0.010 gr/dscf.		
		7. When demonstrating compliance, PM10 emissions shall be determined by EPA Method 5 (as approved by the PSAPCA Board) or EPA Method 201A/202.		
		8. Spectrum Glass shall comply with requirements of 40 CFR 60, Subpart CC, and notify the U.S. Environmental Protection Agency of construction.		
		Description		
		Two 9 tons/day Furnaces (#4 and #5) fired by oxy/fuel and natural gas, each with a Mikro-Pulsaire 2 Baghouse rated at 20,000 cfm each, and two 3 tons/day Furnaces (Daytank #F and #G), one Forehearth rated at 20,000 cfm, and change Furnace #2 from natural gas firing to oxy/fuel and natural gas combined at a two-for-one molar ratio.		
<u> </u>	6689	2 Silo Bin Vents	01/24/1997	12/16/1997
		Conditions		
		4. Spectrum Glass shall install and maintain gauges to measure the pressure drop across the Torit TD486 baghouses. Within 90 days after beginning equipment operations, the acceptable ranges for the gauges shall be clearly marked on or nearby the gauges.		
		5. Once each week, Spectrum Glass shall log if the pressure drop was in the acceptable range.		
		6. If the pressure drop is not within the acceptable range, Spectrum Glass shall take correction action as specified in the facility's Operation and Maintenance Plan.		
		7. There shall be no visible emissions from the Torit TD486 baghouses.		
		Description		
		Two Torit TD486 Baghouses rated at 1,350 cfm each to control emissions from soda ash and silica sand silos.		
<u> </u>	8605	One Pneumatic Railcar Unloader with baghouse.	12/11/2001	07/19/2005
		Conditions		
		3. The Railcar Unloader shall have no visible emissions or fallout.		
		4. The Railcar Unloader shall be inspected at least once every other week for visible emissions, fallout, and pressure drop across the filters.		
		5. If the Railcar Unloader is observed to have visible emissions, fallout, or abnormal pressure drop, Spectrum Glass shall investigate the cause and either complete repairs or shut the equipment vented to the baghouse within 24 hours of the observation.		
		6. Spectrum Glass shall record all inspections and corrective actions and maintain these records for at least two years and make them available to Puget Sound Clean Air Agency personnel upon request.		
		Description		
		One Pneumatic Railcar Unloader Whirl-AirFlow 10 BF300 Transporter and Model WAF 180 dust collector at 800 cfm.		
<u> </u>	9599	baghouse	04/13/2007	08/13/2007
		Conditions		

Notices of Construction / Notifications

Inactive? NOC / Notice #
BTR initials

Approved Evaluated

EMISSIONS LIMITS

3. Spectrum Glass Co. shall not allow visible emissions or fallout from the baghouse.
4. Spectrum Glass Co. shall not allow emissions from the baghouse exhaust to exceed 0.01 gr/dscf as measured by a compliance source test following the requirements of Regulation I, Section 3.07.

PASSIVE DUST COLLECTOR OPERATIONS

5. Spectrum Glass Co. shall install and maintain a pressure gauge to measure the pressure drop across the baghouse.
6. Spectrum Glass Co. shall, within 60 days after startup, determine the acceptable pressure drop range across the baghouse during normal operations, and record the maximum and minimum pressure drop readings in the facility's Operations and Maintenance Plan as required by Puget Sound Clean Air Regulation I, Section 5.05. The acceptable operating range shall be marked on or nearby the pressure drop gauge.

INSPECTIONS

7. The baghouse shall be inspected at least once per week when equipment vented to the unit is operating. Inspections shall include a check for visible emissions and fallout. Inspections shall include recording the presence or absence of visible emissions or fallout, and that the pressure drop across the baghouse is within the established range of Condition No. 6.

CORRECTIVE ACTIONS

8. If visible emissions or fallout are observed, Spectrum Glass Co. shall investigate the cause and either initiate repairs or shut down the equipment vented to the baghouse within 24 hours of the observation.

RECORDS

9. Records of all inspections and corrective actions shall be maintained for at least two years and made available to Puget Sound Clean Air Agency personnel upon request.

PERMIT CONTINUITY

10. This Order replaces and supersedes Order of Approval No. 4345 dated April 15, 1992.

Description

Replacement of baghouse of number two glass furnace. Original baghouse at end of life. Baghouse model is Serbaco Inc. TL480-8 WIP-1C, rated at 20,000 cfm with air to cloth ratio of 3.32.

Air Contaminant Generating Equipment, Associated Control Equipment**Inactive?**

- | | | | | |
|---|--|----------------------|----------------|--|
| □ | (1) pulverizing (includes ball, bowl and roller mills)
Former Description: Crushing System | | | |
| | (2) Glass--Outside
Rated: 0 | Year Installed: 1979 | NC/NOT #: | |
| □ | *CE (2) Water sprays (2)
Glass Crushers
Rated: 0 CFM | Year Installed: 1979 | NC/NOT #: | |
| □ | (2) melt furnace (AOD, crucible, electric arc, electric induction, glass, pot, sweat)
Former Description: Furnace
Glass Melter #1 Electric - Nat Gas Start-Up
Rated: 18 Ton/Day
Other Fuel | Year Installed: 1986 | NC/NOT #: 1891 | |

Air Contaminant Generating Equipment, Associated Control Equipment**Inactive?**

- ☐ (3) melt furnace (AOD, crucible, electric arc, electric induction, glass, pot, sweat) (4)
Former Description: Furnace
Glass - Day Tanks Electric (A-D)
Rated: 1 Ton/Day Year Installed: NC/NOT #:
Natural Gas / Other Fuel
- ☐ (4) storage silo/bin
Former Description: Storage Bin/Silo System
(4) Glass Mix Silo - batch mixing
Rated: 0 Year Installed: 1980 NC/NOT #: 2093
- ☐ CE (1) Baghouse
(Batch) Glass Mix Silo
Rated: 0 CFM Year Installed: 1980 NC/NOT #: 2093
- ☐ CE (8) Baghouse (3)
Rated: 1350 CFM Year Installed: 1994 NC/NOT #: 5626
- ☐ * (5) mixer (includes dispersers, blenders)
Former Description: Mixer
Squirrel Cage
Rated: 0 Year Installed: 1980 NC/NOT #: 2093
- ☐ (6) melt furnace (AOD, crucible, electric arc, electric induction, glass, pot, sweat)
Former Description: Furnace
#3 - Electric Glass
Rated: 10 Ton/Day Year Installed: NC/NOT #: 2871
- ☐ (7) melt furnace (AOD, crucible, electric arc, electric induction, glass, pot, sweat)
Former Description: Furnace
2 Ton/Day Daytank 'E' Glass
Rated: 2 Million BTU/Hr Year Installed: 1988 NC/NOT #: 2981
- ☐ (8) melt furnace (AOD, crucible, electric arc, electric induction, glass, pot, sweat)
Former Description: Furnace
#2 Spectrum Single Phase Glass Oxyfuel Fired 1966
Rated: 7 Ton/Day Year Installed: 1989 NC/NOT #: 6497
Other Fuel
- ☐ CE (4) Baghouse
Serbaco Inc. TL480-8 WIP-1C, air-to-cloth ratio of 3.32
Rated: 20000 CFM Year Installed: 2007 NC/NOT #: 9599
- ☐ * (9) abrasive blasting/shot peening cabinet, booth or room
Former Description: Sandblasting Booth
For Prototypes
- ☐ * (10) melt furnace (AOD, crucible, electric arc, electric induction, glass, pot, sweat)
Former Description: Furnace
(test Furnace) [Furnace T = 150 lbs]
Rated: 25 Kw Year Installed: 1990 NC/NOT #:
Electric
- ☐ (11) surface coating, non-spray (dip, flow, roll or powder, includes curing oven)
Former Description: Glaze & Enamel Exhaust Booth
Irridized W/2 Spray Hoods
Rated: 0 Year Installed: 1991 NC/NOT #: 3101
- ☐ CE (3) Baghouse
Donaldson-Day Mod 60hpt8 Hybred Pulsejet (155f)
Rated: 6000 CFM Year Installed: 1991 NC/NOT #: 3101
- ☐ (12) melt furnace (AOD, crucible, electric arc, electric induction, glass, pot, sweat)
Former Description: Furnace
#4 Oxyfuel/Natural Gas
Rated: 9 Ton/Day Year Installed: NC/NOT #: 6497
Other Fuel / Natural Gas
- ☐ CE (5) Baghouse
Mikro-Pulsaire 2 For Furnaces #4
Rated: 20000 CFM Year Installed: NC/NOT #: 6497

Air Contaminant Generating Equipment, Associated Control Equipment**Inactive?**

- ☐ (14) melt furnace (AOD, crucible, electric arc, electric induction, glass, pot, sweat)
Former Description: Furnace
Daytank #F
Rated: 3 Ton/Day Year Installed: NC/NOT #: 6497
- ☐ (15) melt furnace (AOD, crucible, electric arc, electric induction, glass, pot, sweat)
Former Description: Furnace
Forehearth
Rated: 20000 CFM Year Installed: NC/NOT #: 6497
- ☐ * (16) storage tank
Former Description: Tank - Storage
Above ground storage tank - Diesel
Rated: 1500 Gal Year Installed: NC/NOT #:
- ☐ * (17) IC engine (generator, pump, compressor)
Former Description: Generator
(no NOC per JMW)
Rated: 750 Kva Year Installed: NC/NOT #:
- ☐ (18) conveyor/elevator (belt, screw, pneumatic, bucket)
Former Description: Pneumatic System Unloading
Whirl-AirFlow 10 BF300 Transporter
Rated: 0 Year Installed: 2001 NC/NOT #: 8605
- ☐ CE (7) Baghouse
Model WAF 180
Rated: 800 CFM Year Installed: 2001 NC/NOT #: 8605

* This item does not require a Notice of Construction.

Other Control Equipment**Inactive?**

- ☐ (6) Baghouse (2)
Torit Td486 Soda Ash And Silica S& Silos & NC 5626
Rated: 1350 CFM Year Installed: 1997 NC/NOT #: 6689

* This item does not require a Notice of Construction.

Emission Summary - None for 2013 or 2014

Fee Categories for 2016 Invoice

Reg I, 5.03(a)(1) - Facilities subject to federal emission standards (Title 40 CFR)

Reg I, 5.03(a)(6) - Facilities with particulate control equipment ($\geq 2,000$ cfm)

Reg I, 5.03(a)(6) - Facilities with particulate control equipment (unknown cfm)

Reg I, 5.07(c)(1) - 40 CFR 60 Subpart CC

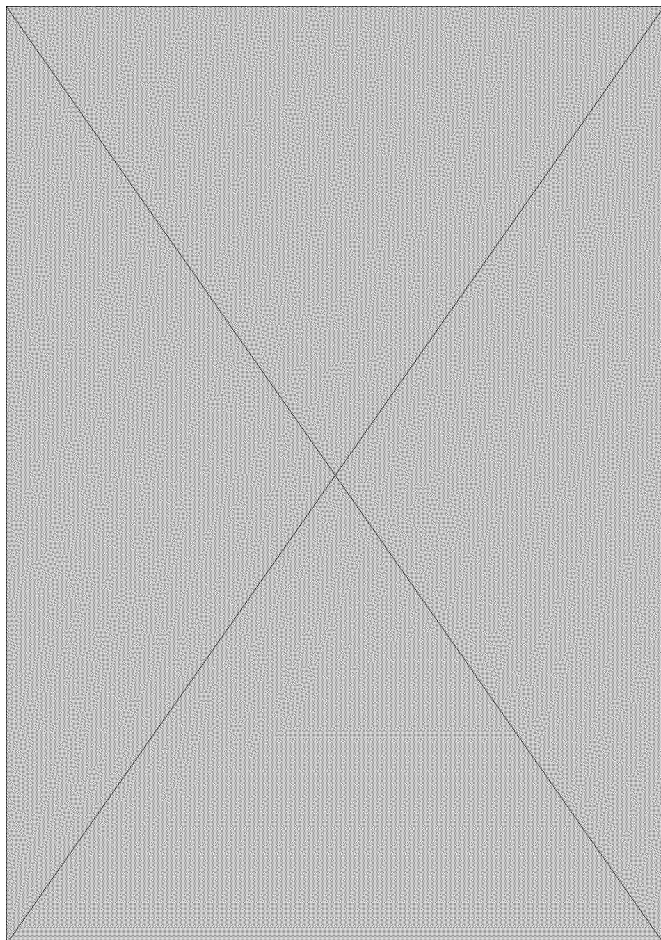
No Outstanding Annual Invoice Fees for this Source

To: Hedgpeth, Zach[Hedgpeth.Zach@epa.gov]; McClintock, Katie[McClintock.Katie@epa.gov]
From: Narvaez, Madonna
Sent: Fri 2/12/2016 8:32:56 PM
Subject: Brief description of the Xact sampler

The Xact 625, shown in Figure 2-1, determines metals in airborne PM less than 10 micrometers (μm) in aerodynamic diameter (PM_{10}). Metals determination by the Xact 625 is based on the principle of X-ray fluorescence (XRF), in which X-rays from a source cause removal of an electron from an inner electronic shell of a metal atom in a sample. The vacancy in the inner shell is then filled by an electron from an outer shell, with resulting emission of an X-ray with a wavelength longer than that of the original excitation and characteristic of the metal in question. The Xact 625 uses energy-dispersive XRF (EDXRF), in which the detector and electronics resolve emitted X-rays based on their energy. The EDXRF approach allows use of a relatively simple optical path and a relatively low power X-ray source, and thus reduces the instrument cost. The EDXRF approach also provides acquisition of the entire X-ray spectrum very rapidly, so that many elements in the periodic table can be detected within a few seconds.

To monitor metals in atmospheric PM, the Xact 625 uses an automated moveable filter tape system, in which sample air is drawn through a small spot on the tape, collecting and concentrating PM_{10} onto that spot. The tape then advances, placing the collected sample spot in the X-ray excitation and analysis section of the instrument and initiating sampling onto a previously unexposed spot on the tape. The sequence of sampling and analysis can continue automatically, limited only by the supply of filter tape. The duration of sample collection at each spot can be set at a constant interval, or varied to maintain detection performance in the face of varying atmospheric PM_{10} levels. The Xact 625 samples ambient air at a constant flow rate of 16.7 L/min (i.e., 1 m^3/hr). The Xact 625's sample inlet is designed to provide uniform sample deposition, and the instrument analyzes approximately 90% of the sample spot area, to minimize effects of sample inhomogeneity. The Xact 625 incorporates sensors for temperature and atmospheric pressure, and uses those data to maintain a constant volumetric sample flow and consequently an accurate PM_{10} inlet size cut. In addition, the Xact 625 performs the following automatic internal QC checks to assure data quality:

- **Internal energy alignment check, performed by XRF analysis of a copper rod, conducted over a 15-minute period starting at midnight each day**
- **Upscale rod check, performed by XRF analysis of a metal rod containing chromium, lead, copper, and cadmium, conducted once per day over a 15-minute period**
- **Flow check, conducted at the same time as the upscale rod check, to determine the Xact 625 sample air flow by insertion of a second mass flow meter into the flow path**
- **Palladium rod stability check, conducted by XRF analysis of a palladium rod in every ambient sample analysis.**



Madonna Narvaez

Sr. Air Toxics Advisor

USEPA, R10

1200 Sixth Ave., Ste 900

MC: AWT-107

206.553.2117 - phone

206.553.0110 - fax

To: McClintock, Katie[McClintock.Katie@epa.gov]
From: Holsman, Marianne
Sent: Mon 2/29/2016 4:37:31 PM
Subject: FW: USE THIS: OAR Memo to Regions re: Art Glass Facilities
Memo from Janet McCabe on Art Glass Manf. emissions feb25.pdf
Desk Statement -- glass manufacturing facilities v2.docx

Marianne

Follow us!



From: Davis, Matthew
Sent: Friday, February 26, 2016 1:48 PM
To: Shore, Berry <Shore.Berry@epa.gov>; Wise, Allison <Wise.Allison@epa.gov>; Myers, Bryan <Myers.Bryan@epa.gov>; Beckmann, Ronna Erin <beckmann.ronna@epa.gov>; Maier, Brent <Maier.Brent@epa.gov>; Deamer, Eileen <deamer.eileen@epa.gov>; Ferrell, Mark <Ferrell.Mark@epa.gov>; Delli-Gatti, Dionne <Delli-Gatti.Dionne@epa.gov>
Cc: Holsman, Marianne <Holsman.Marianne@epa.gov>; Schuster, Cindy <Schuster.Cindy@epa.gov>; Philip, Jeff <Philip.Jeff@epa.gov>
Subject: FW: USE THIS: OAR Memo to Regions re: Art Glass Facilities

Hello RCLs in Regions 2, 3, 4, 5, 9, and 10,

The attached memo in response to the air toxics issue in Portland, OR on facilities that manufacture colored art glass was sent from HQ to Regional offices yesterday, and is being made public today. The memo summarizes the ongoing activities to support Oregon, directs each Regional Office to investigate the potential national implications of the findings in Portland, and lists 14 facilities that appear to be similar to those in Portland. I'm going to be sending the memo as a heads up, with the desk statement as email cover, to Congressional leadership and the offices of members on House Energy and Commerce, Senate Environment and Public Works, and Appropriations. I've checked with Nichole and she agrees it probably makes sense for you

all to send it to the relevant Senate and House offices that may have a facility on the list based on our research thus far. I've put together a list of relevant House members based on the initial list, below, so as to make it easier for you. Feel free to give me a call if you have any questions or concerns.

Thanks,

Matthew

Matthew H. Davis

Air Team, Office of Congressional Affairs

Office of Congressional and Intergovernmental Relations

Office of the Administrator, U.S. EPA

1200 Pennsylvania Ave NW, MC 1301A

Washington, DC 20460

(202) 564-1267

Districts that may have an art glass manufacturing facility on the initial list:

NY: Rep. Tom Reed

PA: Rep. Bill Shuster

WV: Rep. David McKinley, Rep. Alex Mooney, Rep. Evan Jenkins

NC: Rep. Patrick McHenry

GA: Rep. Earl Carter, Rep Barry Loudermilk

OH: Rep. Steve Stivers, Rep. Joyce Beatty (nearby enough to be of interest)

IN: Rep. Todd Rokita, Rep. Susan Brooks (nearby enough to be of interest)

CA: Rep Janice Hahn, Rep. Maxine Waters (nearby enough to be of interest)

WA: Rep. Suzan DelBene, Rep. Rick Larsen (nearby enough to be of interest)

From: Millett, John

Sent: Friday, February 26, 2016 4:20 PM

To: PADs and Alternates <PADs_and_Alternates@epa.gov>

Cc: Harrison, Melissa <Harrison.Melissa@epa.gov>; Jones, Enesta <Jones.Enesta@epa.gov>;

Davis, Alison <Davis.Alison@epa.gov>; Davis, Matthew <Davis.Matthew@epa.gov>;

Drinkard, Andrea <Drinkard.Andrea@epa.gov>; Terry, Sara <Terry.Sara@epa.gov>; Wortman,

Eric <Wortman.Eric@epa.gov>; Millett, John <Millett.John@epa.gov>

Subject: USE THIS: OAR Memo to Regions re: Art Glass Facilities

Hi All – The following information does NOT directly affect regions 1, 6, 7 and 8.

OAR acting AA Janet McCabe sent the attached memo to the RAs and ADDs yesterday. Also attached is a desk statement for your use, if needed. Please refer any press inquiries to HQ – Enesta Jones and Melissa Harrison. Any questions or concerns, please contact me.

Thanks –

John

please use this desk statement – marked as “v2” and below.

Desk Statement regarding certain glass manufacturing facilities

High levels of air toxics were monitored in the air near two art glass manufacturing facilities in Portland, Oregon. The EPA has been working closely with Oregon officials to further understand the emissions and the risk to the public, if any and to work to reduce any risk to the public. As a precaution, the EPA has also requested its Regional Offices to gather information to better understand similar art glass

manufacturing plants across the country – e.g., locations, air emissions, pollution controls, business operations, etc. Our current information indicates that there are fewer than 20 art glass manufacturing plants nationwide with significant emissions levels. Further understanding of these facilities will inform what actions we take to ensure compliance with existing regulations as well as to review and, if necessary, revise the current federal emission standards to ensure these plants operate in an environmentally safe manner.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 25 2016

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Art Glass Manufacturing - Request for Regional Input

FROM: Janet G. McCabe *JGM*
Acting Assistant Administrator

TO: Regional Air Division Directors
Regions 1-10

I am writing to make you aware of an air toxics situation that has been taking place in Region 10 and ask your assistance as we work to understand the national implications of this situation. In this memo, I am summarizing the situational background and the ways in which EPA is supporting Oregon to respond. I hope you were able to attend yesterday's special purpose call and have a better understanding of the situation on the ground in Portland. My specific asks of you moving forward are to, by March 9, 2016:

1. Provide any information you currently have about the sources we've identified (attached), and if you are aware of any additional art (or colored) glass manufacturing facilities not on this list.
2. Communicate with your states to:
 - a. ensure they are aware of the issues associated with these sources in Oregon;
 - b. offer your assistance in determining whether there are similar emissions of concern associated with these sources; and
 - c. request your states provide any information they have about these sources.
3. Let me know if your Region has special expertise in this type of facility or control of these types of pollutants.

Background

The U.S. Forest Service (USFS), in a pilot study, found moss collected from trees around art glass manufacturers in the Portland area—and Bullseye Glass in particular—had much higher concentrations of heavy metals than other areas in the city. This result prompted the Oregon Department of Environmental Quality (ODEQ) to set up air monitoring systems near the company to collect 24-hour air samples every few days over a 30-day period in October 2015.

In early February, ODEQ made publicly available the results of that air monitoring, which showed high levels of cadmium and arsenic in the air and began investigating potential sources. Preliminary work suggests that the metals found in the monitoring were coming in large part from Bullseye Glass, an art glass manufacturing facility. Elevated cadmium levels were also found in proximity to another Portland glass manufacturer, Uroboros Glass. Both companies have suspended the use of chromium and

cadmium; Bullseye, which also used arsenic, has suspended its use. ODEQ has provided a summary at <http://www.deq.state.or.us/nwr/docs/metalsem/FSDEQAdressingAirToxics.pdf>, and they are providing regular updates and technical information on the Portland Metals website at <http://www.deq.state.or.us/nwr/metalsemissions.htm>.

OAQPS has identified 14 other similar facilities, which, like Bullseye and Uroboros, may manufacture art glass and may use raw metals in their processes. A Clean Air Act National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR Part 63, Subpart SSSSSS) for glass manufacturing area sources has been in effect since 2007. This rule applies to continuous furnaces that produce 50 tons or more of glass per year using any amount of toxic metals in the glass recipe. As noted below, one area of investigation is the applicability of Part 63, Subpart SSSSSS to these and similar facilities.

EPA Assistance

The EPA has been fully engaged to support Oregon and others as this situation has developed, including supporting efforts to identify all art glass producers that might have similar issues and all other sources of metals emissions in Oregon.

In Region 10:

- Staff and management are working closely with state partners to provide significant assistance to ODEQ and the Oregon Health Authority (OHA). Oregon has set up an incident command structure for managing this issue, and the Region 10 Operations Office in Portland is part of the team, helping to coordinate EPA's assistance as a part of the state's ongoing work.
- EPA Region 10's focus has been on supporting Oregon to work directly with impacted facilities and to provide assistance in the development of air and soil sampling programs. Two weeks ago, EPA Region 10 enforcement staff, including an expert on glass manufacturing facilities, conducted a joint inspection with ODEQ of the Bullseye Glass Company and an EPA inspection of Uroboros Glass. The EPA subsequently inspected Spectrum Glass in Washington State and conducted a joint inspection with ODEQ of Northstar Glassworks in Portland. The EPA's engineers and technical specialists from across the country¹ have participated in subsequent technical meetings with ODEQ and Bullseye Glass to provide guidance on analytical methods to characterize the sources and information on technologies available to control emissions from glass manufacturing facilities. We have supported Oregon in their actions to secure agreements from the companies to stop using the compounds that are associated with the toxic emissions found in the air monitoring until other solutions can be developed. ODEQ and OHA have been very proactive in their efforts to identify risks to the public from air toxics and in response to this specific situation.
- For the assessment of impacts, EPA Region 10 has loaned air monitoring equipment and provided supplies to ODEQ for collection of air samples to analyze for heavy metals. The EPA has also loaned ODEQ equipment to analyze soil samples and offered access to one of the EPA's science and technical assistance contractors. The EPA air and cleanup staff have offered assistance in the development of air and soil sampling programs. In addition, the EPA risk assessors stand ready to

¹ Region 10 added experts to our team from Region 7, which has worked extensively with the development of the Wool Fiberglass Rule to determine and address hexavalent chromium emissions in EJ neighborhoods. Also, OAQPS' Measurement Technology Group is providing guidance and information on hexavalent chromium emissions measurement methods. The National Risk Management Laboratory has provided background materials on chromium reactions at high temperatures.

work with the OHA, Multnomah County Health Department, and the Agency for Toxics Substances and Disease Registry to help assess and communicate the public health risks using the limited data currently available and to refine the assessment as more information becomes available on concentrations of metals in the air and soil.

At Headquarters:

- Relevant experts from the Office of Air Quality Planning and Standards (OAQPS) and the Office of Research and Development (ORD) are providing technical support to Region 10 on source testing, health impacts of air toxics levels and other monitoring and impacts issues as they arise.
- The Office of Enforcement and Compliance Assistance (OECA), the Office of General Counsel (OGC) and OAQPS are jointly investigating the applicability of Part 63, Subpart SSSSSS to these and similar facilities nationally.
- OECA and Region 10 have also discussed potential use of authority under Clean Air Act Section 114 to request additional information from facilities nationwide.
- OAQPS is working to improve our characterizations of emissions from art glass manufacturing facilities.
- OAQPS and ORD are collaborating to assess the viability of the original USFS study as a screening methodology for air toxics and review screening modeling by state of Washington. This will help determine whether this modeling can be applied to other art glass manufacturing facilities.
- OAQPS is also considering the feasibility of using the Community Scale Air Toxics Ambient Monitoring funds (FY16) to reimburse the ODEQ for Portland monitoring and conduct new monitoring around other plants.

We will keep you posted on these activities and look forward to receiving additional information from you as requested above. If you or your states have questions, please contact Mike Koerber in OAQPS.

Attachment

Company Name	Street Address	Region	City	State	Zip	Phone	Notes
1 Steuben	One Museum Way	2	Corning	NY	14830	607 937-5371	fabricator?
2 Blenko Glass	9 Bill Blenko Dr.	3	Milton	WV	25541	304 743-9081	
3 Youghiogheny Glass	300 S 1st Street	3	Connellsville	PA	15425	724 628-3000	
4 Wissmach Glass	420 Stephen St.	3	Paden City	WV	26159	304 337-2253	
5 Fenton Glass	700 Elizabeth St	3	Williamstown	WV	26187	304 375-6122	closed but permitted
6 Armstrong Glass	55 Chastain Road NW	4	Kennesaw	GA	30144	770 919-9924	
7 Origin Glass (Elan Technologies)	169 Elan Court	4	Midway	GA	31320	912 880-3526	
8 Parramore Glass	PO BOX 2777	4	Asheville	NC	28802	828 456-4414	
9 Franklin glass	222 East Sycamore St	5	Columbus	OH	43206	614 221-2972	
10 Kokomo Glass	1310 S. Market St.	5	Kokomo	IN	46902	765 457-8136	
11 Pacific Art Glass	125 West 157th St	9	Gardena	CA	90248	310 780-4047	fabricator?
12 Uroboros Glass	2139 N. Kerby Ave. SE	10	Portland	OR	97227	503 284-4900	
13 Spectrum Glass	21415 87th Avenue SE	10	Woodinville	WA	98072	425 483-6699	
14 Bullseye glass	3722 SE 21st Ave	10	Portland	OR	97202	503 232-8887	
15 System 96	24105 Snohomish-Woodinville Road	10	Woodinville	WA	98072	425 483-6699	fabricator?
16 Northstar Glassworks	8228 SE 26th Place	10	Portland	OR	97202	866 684-6986	makes colored borosilicate glass
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To: McClintock, Katie[McClintock.Katie@epa.gov]
From: Koerber, Mike
Sent: Fri 2/26/2016 8:37:05 PM
Subject: FW: Portland glass facilities
Memo from Janet McCabe on Art Glass Manf. emissions feb25.pdf

Katie – Here is the version sent to the Regions. We missed a typo on page 2, which refers to 16 facilities (Bullseye, Uroboros and 14 other similar facilities), but the list has 19. Oh, well.

Mike

From: McCabe, Janet
Sent: Thursday, February 25, 2016 7:09 PM
Subject: Portland glass facilities

Air Division Directors—

Attached is a memo in followup to the special purpose call OAQPS held yesterday about the glass facilities in Portland and beyond. Please contact Mike Koerber if you have any questions.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 25 2016

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Art Glass Manufacturing - Request for Regional Input

FROM: Janet G. McCabe *JGM*
Acting Assistant Administrator

TO: Regional Air Division Directors
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(date stamp)

Approved OMB 2020-0003
Approval expires 02/28/2017

BY CERTIFIED U.S. MAIL; RETURN RECEIPT REQUESTED

Kyle Barker
President
Spectrum Glass Co.
P.O Box 646
Woodinville, WA 98072-0646

Re: Request for Substantiation of Information Claimed as Confidential Business Information

Dear Mr. Barker:

The U.S. Environmental Protection Agency ("EPA" or "Agency") is seeking to determine the entitlement to confidentiality of the information Spectrum provided orally and in writing to EPA regarding the Spectrum Glass Co. facility in Woodinville, Washington. Spectrum provided information to EPA during, and after, an EPA inspection of the Woodinville facility on February 16-17, 2016. The information includes: the documents provided to EPA during the inspection, notes taken by EPA during the inspection, the 2nd submission of documents received by EPA February 25, 2016 and the 3rd submission of documents hand-delivered to EPA on February, 29, 2016.

This letter is to notify you that the EPA Region 10 Office of Regional Counsel will be making a final confidentiality determination concerning this information. If you feel that some or all of the above information is entitled to confidential treatment, please specify which portions of the information you consider confidential. Please be specific by page, paragraph, and sentence when identifying the information subject to your claim. Any information not specifically identified as subject to a confidentiality claim will be disclosed to the public without further notice to you. For each item or class of information that you identify as being subject to your claim, please answer the following questions, giving as much detail as possible:

1. For what period of time do you request that the information be maintained as confidential, e.g., until a certain date, until the occurrence of a specified event, or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, please specify that event.
2. Information submitted to EPA becomes stale over time. Why should the information you claim as confidential be protected for the time period specified in

your answer to question #1?

3. What measures have you taken to protect the information claimed as confidential? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
4. Is the information contained in any publicly available material such as the Internet, publicly available databases, promotional publications, annual reports, or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
5. Has any governmental body made a determination as to the confidentiality of the information? If so, please attach a copy of the determination.
6. For each category of information claimed as confidential, explain with specificity why release of the information is likely to cause substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as substantial, and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?
7. Do you assert that the information is submitted on a voluntary or a mandatory basis? Please explain the reason for your assertion. If the business asserts that the information is voluntarily submitted information, please explain whether and why disclosure of the information would tend to lessen the availability to EPA of similar information in the future.
8. Any other issue you deem relevant (including, , reasons why you believe that the information you claim to be CBI is not emission data as defined in 40 C.F.R. § 2.301(a)).

Please note that you bear the burden of substantiating your confidentiality claim. Conclusory allegations will be given little or no weight in the determination. If you wish to claim any of the information in your response as confidential, you must mark the response “**CONFIDENTIAL**” or with a similar designation, and must bracket all text so claimed. Information so designated will be disclosed by EPA only to the extent allowed by, and by means of the procedures set forth in, 40 C.F.R. Part 2, Subpart B. If you fail to claim the information as confidential, it may be made available to the public without further notice to you.

Your comments must be postmarked or hand delivered to this office, or e-mailed to (e-mail address), by the 15th working day after your receipt of this letter. You may seek an extension of time to submit your comments to this office, but the request must be made before the end of the

15-day period. Except in extraordinary circumstances, no extension will be approved. Failure to submit your comments within that time will be regarded as a waiver of your confidentiality claim or claims, and EPA may release the information.

If you have any questions regarding this request, please contact Kris Leefers at 206-553-1532 or by email at Leefers.kris@epa.gov.

Sincerely,

Scott Downey, Manager
Office of Enforcement, Air and RCRA Unit

Do we know who is representing them? If so we can include them as a CC

**SAMPLE LETTER B PLUS INQUIRY IF BUSINESS WANTS TO ASSERT A CBI
CLAIM AND QUESTION ABOUT EMISSION/EFFLUENT DATA**

**REQUEST FOR SUBSTANTIATION FROM AN AFFECTED BUSINESS OTHER
THAN IN RESPONSE TO A REQUEST UNDER THE FREEDOM OF
INFORMATION ACT PLUS INQUIRY IF BUSINESS WANTS TO ASSERT A CBI
CLAIM AND QUESTION ABOUT EMISSION/EFFLUENT DATA**

(date stamp)

Approved OMB 2020-0003
Approval expires 02/28/2017

BY CERTIFIED U.S. MAIL; RETURN RECEIPT REQUESTED

Kyle Barker
President
Spectrum Glass Co.
P.O Box 646
Woodinville, WA 98072-0646

Re: All information provided orally and in writing by Spectrum during EPA's February 17th
inspection and all information provided since

Dear Mr. Barker:

The U.S. Environmental Protection Agency ("EPA" or "Agency") is seeking to determine the entitlement to confidentiality of the notes taken by EPA during the 2-17-16 inspection, the documents provided to EPA during the 2-17-16 inspection, the 2nd submission of documents received by EPA February 25, 16 and the 3rd submission of documents hand-delivered to EPA on February, 29, 2016. In accordance with applicable EPA regulations, 40 C.F.R. Part 2, Subpart B, EPA has determined that you might be expected to assert a claim that some or all of the information you submitted to EPA is confidential business information ("CBI").

If you make a CBI claim, you must substantiate your claim as described below. This letter is to notify you that the EPA Region 10 Office of Regional Counsel will be making a final confidentiality determination concerning this information. If you feel that some or all of the above information is entitled to confidential treatment, please specify which portions of the information you consider confidential. Please be specific by page, paragraph, and sentence when identifying the information subject to your claim. Any information not specifically identified as subject to a confidentiality claim will be disclosed to the public without further notice to you. For each item or class of information that you identify as being subject to your claim, please

answer the following questions, giving as much detail as possible:

1. For what period of time do you request that the information be maintained as confidential, e.g., until a certain date, until the occurrence of a specified event, or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, please specify that event.
2. Information submitted to EPA becomes stale over time. Why should the information you claim as confidential be protected for the time period specified in your answer to question #1?
3. What measures have you taken to protect the information claimed as confidential? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
4. Is the information contained in any publicly available material such as the Internet, publicly available databases, promotional publications, annual reports, or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
5. Has any governmental body made a determination as to the confidentiality of the information? If so, please attach a copy of the determination.
6. For each category of information claimed as confidential, explain with specificity why release of the information is likely to cause substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as substantial, and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?
7. Do you assert that the information is submitted on a voluntary or a mandatory basis? Please explain the reason for your assertion. If the business asserts that the information is voluntarily submitted information, please explain whether and why disclosure of the information would tend to lessen the availability to EPA of similar information in the future.
8. Any other issue you deem relevant (including, if pertinent, reasons why you believe that the information you claim to be CBI is not emission data).

Please note that you bear the burden of substantiating your confidentiality claim. Conclusory allegations will be given little or no weight in the determination. If you wish to claim any of the information in your response as confidential, you must mark the response “**CONFIDENTIAL**”

or with a similar designation, and must bracket all text so claimed. Information so designated will be disclosed by EPA only to the extent allowed by, and by means of the procedures set forth in, 40 C.F.R. Part 2, Subpart B. If you fail to claim the information as confidential, it may be made available to the public without further notice to you.

Your comments must be postmarked or hand delivered to this office, or e-mailed to (e-mail address), by the 15th working day after your receipt of this letter. You may seek an extension of time to submit your comments to this office, but the request must be made before the end of the 15-day period. Except in extraordinary circumstances, no extension will be approved. Failure to submit your comments within that time will be regarded as a waiver of your confidentiality claim or claims, and EPA may release the information.

If you have any questions regarding this request, please contact Kris Leefers at 206-553-1532 or by email at Leefers.kris@epa.gov.

Sincerely,


(Signature and Title and Office Name and Address)

Jeffrey L. Hunter
JHunter@perkinscoie.com
D. +1.503.727.2265
F. +1.503.346.2265

March 2, 2016

VIA CERTIFIED MAIL AND ELECTRONIC MAILKatie McClintock
Air Enforcement Officer
EPA Region 10
1200 Sixth Avenue, Suite 900, OCE-101
Seattle, WA 98101**Re: Request for Information to Bullseye Glass Company - Supplemental Response**

Dear Ms. McClintock:

On behalf of Bullseye Glass Company ("Bullseye"), this supplemental letter and accompanying information and documents are sent in response to the U.S. Environmental Protection Agency's ("EPA") February 10, 2016 information request as modified by your February 12, 2016 email (the "Information Request"). Bullseye appreciates the additional time to respond to the remaining requests.

Please note the information in Attachments 3 and 5 is confidential business information pursuant to 40 CFR § Part 2, Subpart B. The batch information and purchase records contain proprietary information. Consistent with 40 CFR § 2.208, Bullseye Glass takes reasonable measures to protect the confidentiality of the information and it intends to continue to take such measures. The information is not, and has not been, reasonably obtainable without Bullseye's consent. To Bullseye's knowledge no statute specifically requires disclosure of the information. Disclosure of the information is likely to cause substantial harm to Bullseye's competitive position. It is Bullseye's position that this information does not constitute emissions data under 40 CFR § 2.301. We request that EPA maintain this information as confidential. Your cooperation in this regard is greatly appreciated.


In submitting this supplement response, Bullseye is not consenting to EPA's authority to make the Information Request to Bullseye and reserves its right to object to EPA's assertion of such authority. In addition, Bullseye does not waive any right, privilege, or objection which Bullseye may have in any subsequent proceeding related in any way to this supplemental response or the initial response. Bullseye reserves the right to object to the use of any information provided in this supplement response and the initial response for any evidentiary purpose whatsoever. By providing this supplemental response, Bullseye is not waiving any privilege which may be claimed, any documents provided herein or which may be provided in the future, or as to any

K. McClintock
March 2, 2016
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discussions related to the issues outlined in this supplemental response or the initial response.
Bullseye reserves the right to supplement this response.

Please call if you have any questions.

Sincerely,

A handwritten signature in dark ink, appearing to read "Jeffrey L. Hunter", is written over a light gray, textured background.

Jeffrey L. Hunter
Counsel for Bullseye Glass Company

Enclosures

cc: Eric Durrin, Bullseye Glass Company

Bullseye Glass Company's Responses
to EPA's Information Request

Bullseye Glass Company hereby responds to your information requests. For your convenience, we have repeated the request followed by Bullseye's response.

Information Request No. 1: Size of each furnace/schematic labeled with furnace info.

Response: *See* Attachment 1 to Bullseye's February 17, 2016 response. Attachment 1 contains the furnace roster and a typical schematic of a furnace at Bullseye.

Information Request No. 2: Batch tickets for each furnace and each melt going back to 10/1/15.

Response: *See* Attachment 2 to Bullseye's February 17, 2016 response. Attachment 2 contains the batch tickets for October 5, 2016 through October 6, 2015 and October 12, 2015 through October 19, 2015. *See* Attachment 3 for remaining batch tickets.

Information Request No. 3: Temperature readings at backwall for each furnace going back to 10/1/15 at whatever frequency recorded. These readings would preferably be in spreadsheet format and include the date and furnace number.

Response: *See* disc attached to Bullseye's February 17, 2016 response. The disc contains the temperature readings.

Information Request No. 4: Confirm the dates each furnace was converted to oxyfuel or any other major modifications other than a brick-for-brick rebuild back to 1996.

Response: *See* Attachment 4.

Information Request No. 5: Refractory materials purchased for last 3 years.

Response: *See* Attachment 5.